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Vol. CLXIX No. 2214 WITH WHICH IS INCORPORATED THE GRAPHIC JUNE 27 1942

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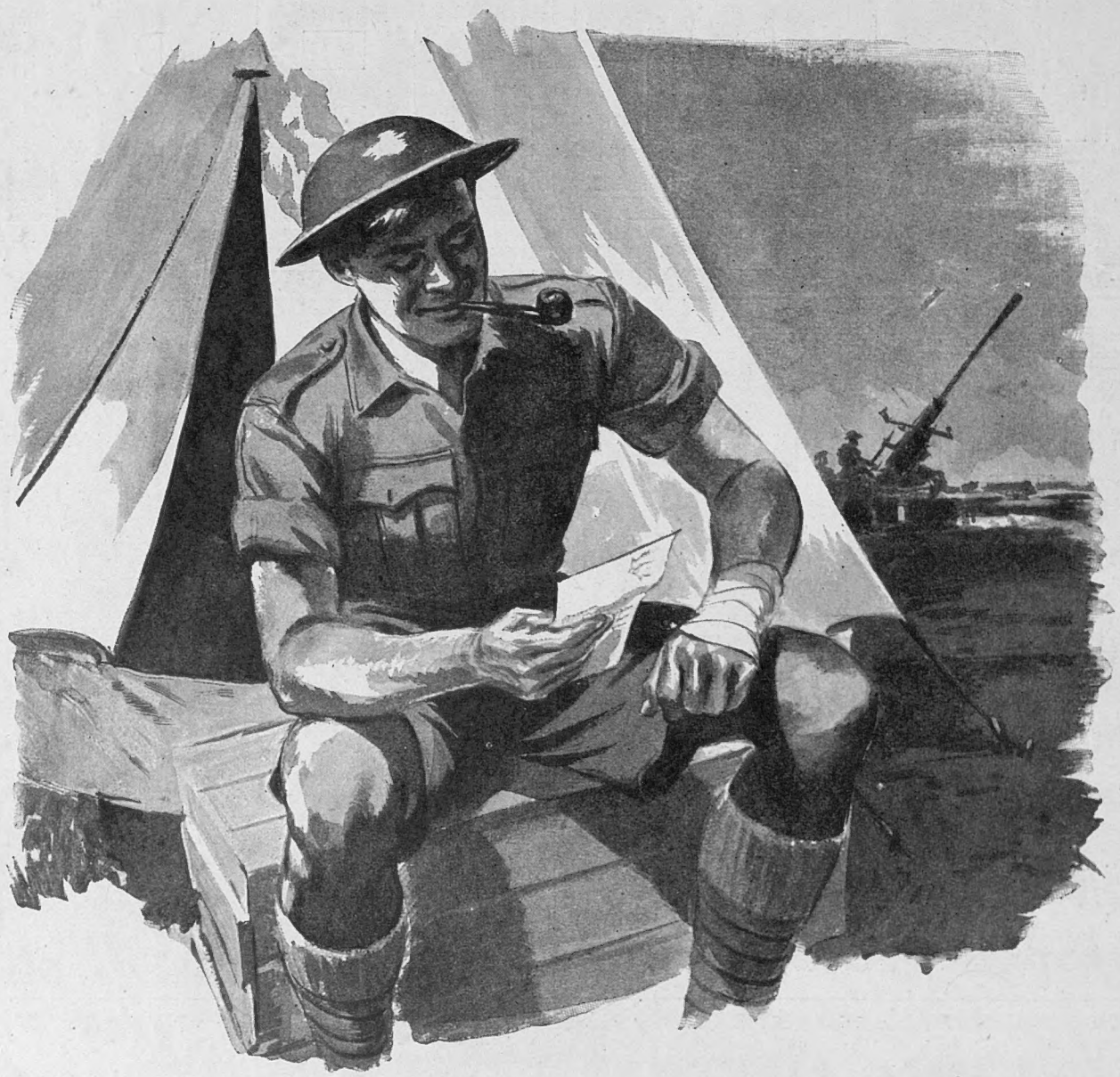

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SYMBOLS OF ENDURANCE

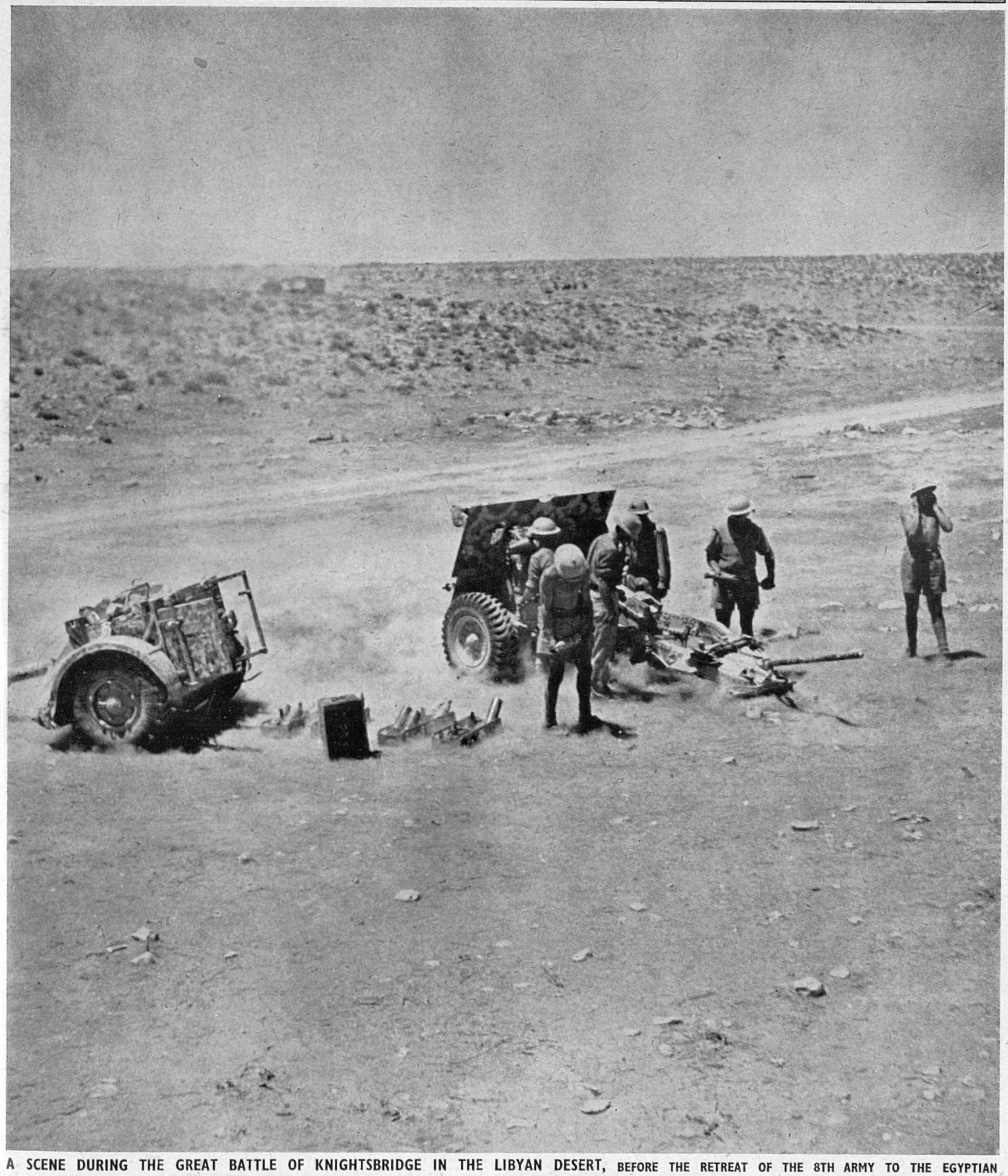
Volume CLXIX No. 2214

The SPHERE, London, June 27, 1942

THE SPHERE

With which is incorporated "THE GRAPHIC"

The Empire's Illustrated Weekly



A SCENE DURING THE GREAT BATTLE OF KNIGHTSBRIDGE IN THE LIBYAN DESERT, BEFORE THE RETREAT OF THE 8TH ARMY TO THE EGYPTIAN FRONTIER : One of the Famous British 25-Pounders Firing at German Transport Vehicles

Knightsbridge was the scene of some of the heaviest fighting of all : it was here that General Ritchie established one of his "Boxes," from which attacks on the enemy's armour and transports were carried out and to which the 8th Army retired when hard pressed after the evacuation of Bir Hacheim. It was at once a rallying-point and a base for a large portion of our forces. Throughout the fighting, the British 25-pounder guns played a considerable part : one of these famous weapons is here shown in action within the Knightsbridge area. When the picture was taken, this gun was smashing up a column of enemy transport vehicles. All about is the scrub-covered, sandy waste which forms the greater part of the desert, where the rough tracks are the only objectives of importance. *(Other pictures of the Libyan campaign will be found on later pages of this issue)*

Postage—Inland, 2d. ; Canada and Newfoundland, 1d. ; Elsewhere Abroad, 1½d.

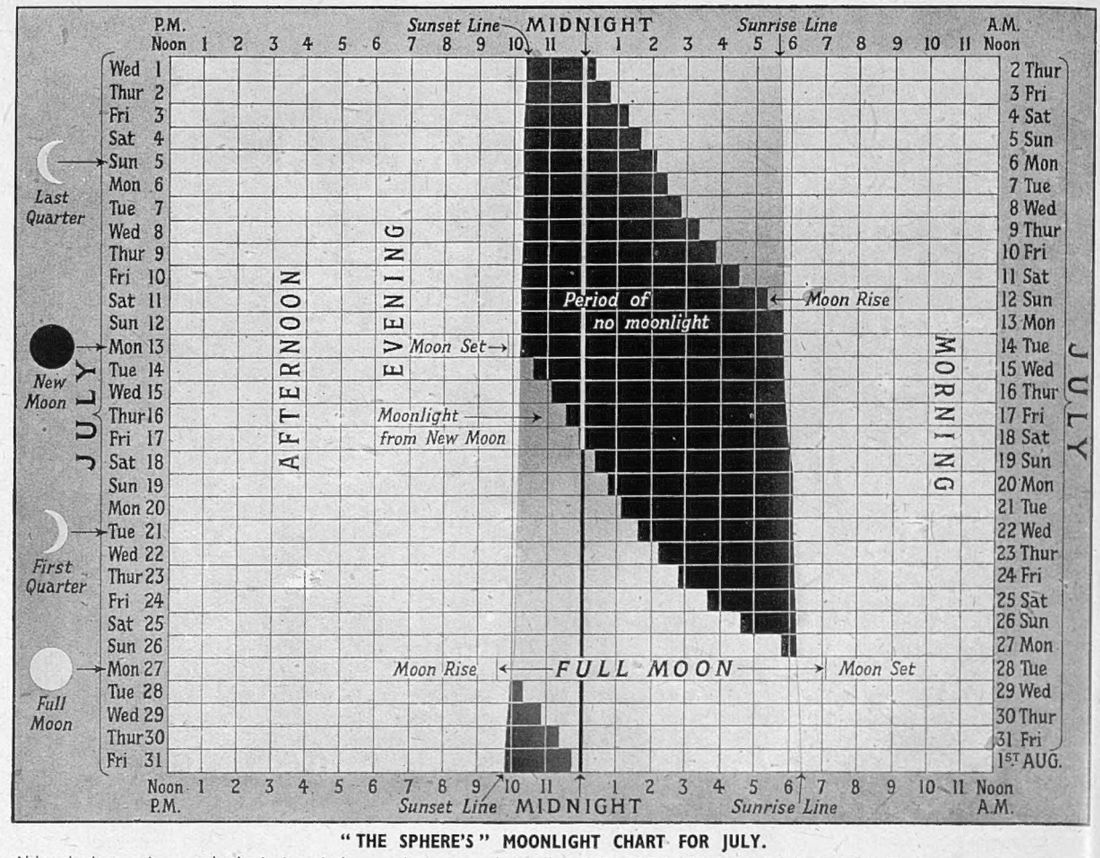
A WAR NEWSLETTER —No. 147

1, NEW OXFORD STREET, W.C.1.

Libya.—There was more point than usual in my recent hope expressed in the "Newsletter," that we should not this time halloo too soon as to the outcome of the battle with Rommel. I want to make these observations about the present situation: Once more, we have had a sharp disappointment, we have taken an unexpected knock, and we have underrated the power of Rommel to "come again" after taking heavy punishment. Once more, after bringing our armaments more in line with Rommel's hitting power, we have been surprised and hard hit by a new advance on Rommel's side in hitting power. These are facts, unpleasant facts, which we need not attempt to minimise, and I am glad to say have not so attempted. We have taken it like men. Another fact is that, in the last week of May (as my letters from Egypt clearly show), the general opinion in military circles in Cairo was confident *that the "next stop" would be Tripoli.* Three weeks later we were holding on to Tobruk with our eyelids—and, then, lost it! We have faced our heavy reverse with infinitely greater dignity, sense and proportion, both at home and abroad, than ever before in the ding-dong of desert and other warfare in this war. Justifications, excuses, victimisation, growls and heady criticism did not rear their heads in Parliament or the Press to any great extent—and that in itself is a signal victory. We *have* advanced in restraint and in sense of proportion. As I ventured to say in that warning note, this war is a war of attrition; and Time, not territory, is the ultimate measure. I don't minimise the importance to us of holding the North African coast as far as Tripoli, nor the heavy handicap to our naval forces while that coast is in enemy hands; but neither should any of us minimise the importance of what that ding-dong struggle is achieving in pinning down so much of Hitler's first-line military power, which he badly needs for Russia and the Caucasus and in the West. The summer is passing. Hitler is now gravely behind schedule. In Libya our losses and disappointments are bitter, but our achievements also have been signal, if their results seem oblique. We must applaud while we sympathise with our gallant and devoted forces in that area of war, and we can do no less than continue to give them our trust and our thanks and our prayers. They are a part of a much wider plan. Rommel has won much kudos, but a very small fraction of his aims. And, if we have not cleared the narrows, neither has Hitler secured his right flank for his oil drive. Come! We in England are at last beginning to learn how to treat "those two impostors"—success and failure—in a war to the death, a war of attrition. And that spells Victory at last.

Two Years' Casualties.—

The figures of war casualties for the first two years of war (excluding "natural causes" deaths) were given out recently and are well worth recording and examining. I will let them speak for themselves. Officers: United Kingdom, 12,500; Dominions, 1,600; India and Burma, 460; Colonies, 61. About 14,000. Other ranks: United Kingdom, 132,000; Dominions, 22,000; India, etc., 8,000; Colonies, 6,000. About 168,000. The figures include killed, wounded, prisoners of war and missing. The Old Country has not sheltered behind the ranks of the younger. It is worth noting that the figure at the end of *one* year of the last Great War stood at 380,000 on the anniversary day of Humble Prayer. The figure of civilian casualties in the same period of the present war was recently given out and gives an astonishing proof of the difference in the character of the two wars, the first still a "soldiers' war," the second a "people's war." These civilian casualties—a holocaust—may be set beside the "handful" of civilian casualties at the end of one year of the First World War. They also challenge comparison with the military casualties. Another very significant sidelight shown by the statistics of two wars is the effect of armour and armoured methods on the reduction of casualties among fighting personnel. Despite the difference in the scale of land battles in which the Empire troops have been involved, the figures tell a clear story.



"THE SPHERE'S" MOONLIGHT CHART FOR JULY.

Although the evenings, at the beginning of the month, are very long, the sun setting less than two hours before midnight, the nights, short as they are, will each successively bring a longer period of darkness. The last quarter appears in the sky on the night of 5th-6th. The night of the 13th-14th brings with it the month's longest period of total darkness. The first-quarter stage will be reached on the night of the 21st-22nd, and the full moon will be seen on the 27th-28th during which there will be moonlight throughout the whole of the night.

A limited number of these charts will be supplied free of charge on application to the Publisher, "The Sphere," Commonwealth House, 1, New Oxford Street, W.C.1, but 2½d. in stamps must be enclosed with the application

Drawing In.

— One of the weaknesses of an average English summer is that—it takes place either in early spring or in autumn! That, no doubt, is why we dismiss the legitimate English summer as "two fine days and a thunderstorm." Already as I write, awaiting a summer day, "the days are beginning to draw in," the beech leaves are yellowing on the northern slopes of the downs and some of the flowering shrubs have their autumn tints. (It always seemed to me absurd that Midsummer Day should come after the longest day.) This June, night frosts may have had something to do with the yellowing of the leaves, combined with cold winds, strong winds and very little moisture. No doubt we shall get our summer in September, as we usually do. Meanwhile. . . . Nothing is going quite according to plan—that is, according to what we conceived to be Hitler's plan. Like the English summer, he is late again; like the English summer, he appears to have lost his initiative. He is still a long way from any of the objectives with which we credited him, and one begins to think that now, while the Allies seek to strike blows in 1942 which will settle Hitler's ultimate fate for certain, Hitler's object is to ensure that the war shall carry on inconclusively into 1943 and 1944. A curious *volte-face* and an interesting change-round.

The Unforgiving Minute.

—Perhaps Stalin would have been glad to accept an honourable peace and forget his vows of vengeance? Then Hitler might once more be free to settle that deferred account with Churchill. "That drunkard Churchill" would never give in—not a hope now. Would Stalin? Stalin had revealed a certain native shrewdness. It would tax even Ribbentrop's ingenuity to persuade the Allies now to give up the jam which they had scraped together so painfully for their high-tea party. Pull back the vital squadrons and panzers from Russia and go all out for England and her bomber nests . . . and take it in the neck from Stalin's advancing hordes? Go all out for Moscow and the Caucasus . . . and have half a dozen more of the greatest war-producing cities in the Reich laid level with the ground, and another big faction of the *Herrenvolk* turned into herring-gutted folk? And if only Japan had been able to keep Roosevelt's hands fully occupied in the Pacific. . . . *Mene, mene* . . . there were letters of fire dancing on the walls of his deep dug-out somewhere near Smolensk. Traitors, assassins, snags, springing up everywhere in the path of his new order and foolproof plans. . . . For a world-conqueror nothing succeeds but success, and success must succeed success non-stop. The unforgiving minute is the enemy of every tyrant. Time is on the side of Justice. He must *act* (and no doubt before these lines see print he will have struck).

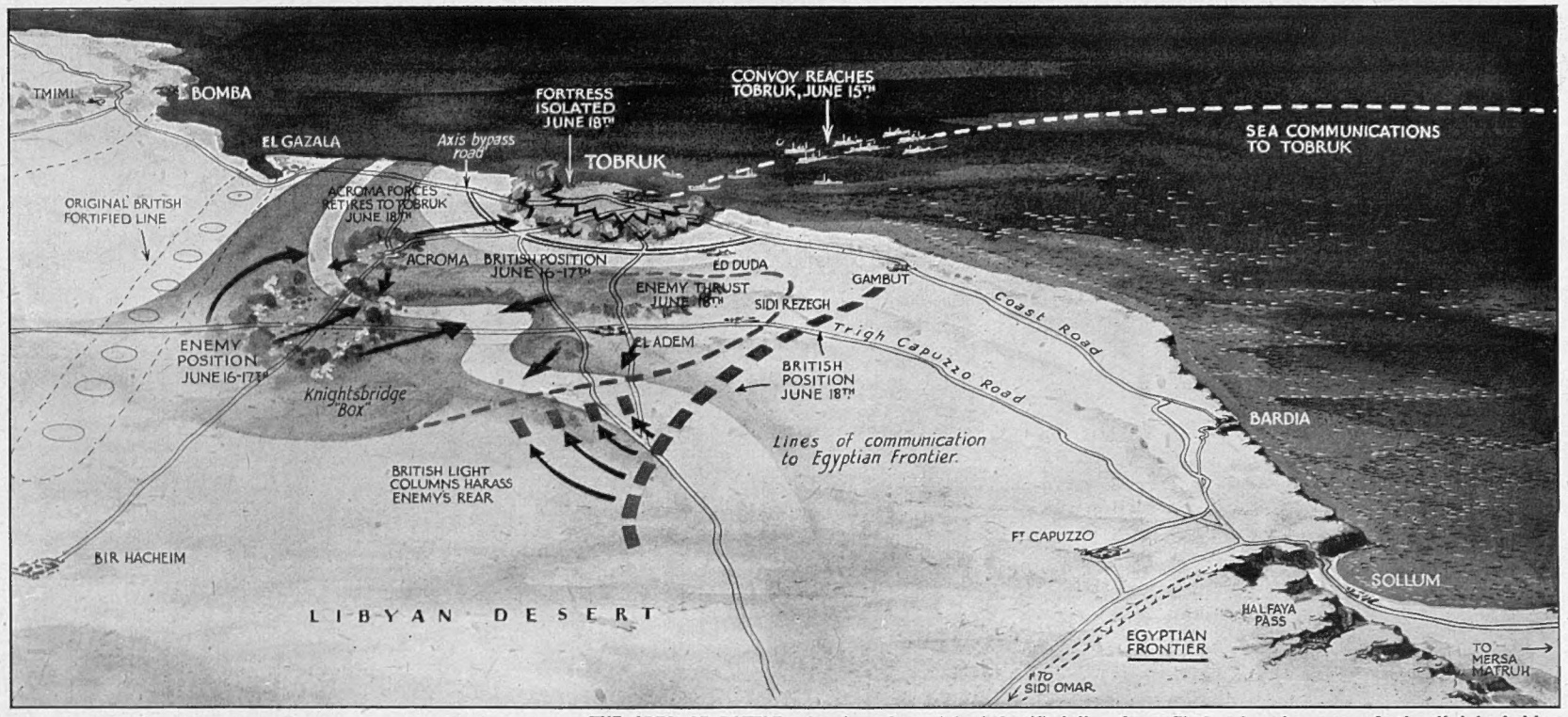
Fruit.

— Autumn gales of 80 m.p.h. and January frosts in June are rather a strong endurance test for harassed gardeners and farmers. Several inches of snow in May is a possibility they are prepared to face, but *June* is another story. Well, it is almost over and the damage has been largely averted, but it was nip and tuck (very nippy) several nights early in June, especially down by the rivers in the South, when the thermometer fell to freezing-point more than once. I know that I was glad of a heavy greatcoat on those evenings when I was learning *al fresco* to be a New Army Man again. I fancy the danger is averted. Our bumper crops of soft and hard fruits and our vital vegetable supplies are pretty well over those very unexpected snags and have only now to face the normal pests of "fly" and bug and caterpillar and jay and pigeon before they are eaten, jammed, canned and stored. This thoughtful act of Nature in opening a generous cornucopia is going to make a great difference to the food supplies of Europe at a vital time before harvest and, on the large view, since some of our friends suffer so much when Germany goes short, we can rejoice in one sense if the bounteousness of Nature is not entirely confined to Allied countries. Here in England we have done better in the matter of fruit to eat than we did in the spring and early summer of last year. Even adults have enjoyed some oranges as a bridge between the end of a poor apple harvest last year and the beginning of the soft fruit season in 1942.

From Turks Island.

—Occasionally I receive oblique information which confirms (what, no doubt, is universal truth) that this war hits all men, women and children, however favourably, or least unfavourably, situated geographically or economically. One such hint came in a letter from an employer of ship labour at Turks Island, B.W.I. I know so little of what may or may not be in the public interest to disclose concerning conditions in that quarter, that I would like some special note from the proper authority on this subject. The writer stresses the great hardships under which his island population now suffers. Food is short, and some supplies appear to be a matter largely of a chance call by an occasional schooner from Jamaica. In order to help the inhabitants, the Governor of Jamaica recently declared the Turks Island group free ports for *all* ships calling for the purpose of embarking or disembarking stevedore labourers. For that purpose all port charges are remitted, and pilotage is no longer compulsory. Labour is readily obtainable, cheap and efficient, at Turks Island at from 2s. to 3s. per twelve-hour day. It was hoped that this information might catch the eye of any steamship company trading to the West Indies. I gladly supply it for what it may achieve, subject to editorial and other revision.

THE OLD STAGER



THE AREA OF BATTLE, showing the original fortified line from El Gazala, the area of the Knightsbridge "Box," the stronghold of Tobruk (which fell on June 21) and the Frontier line to which the Eighth Army have now retired—*Drawing by E. G. Lambert*

THE LIBYAN BATTLES

Back to the Stronghold of Tobruk : And the Passage of the Two Mediterranean Convoys

—*Special* Sphere *Diagrams*

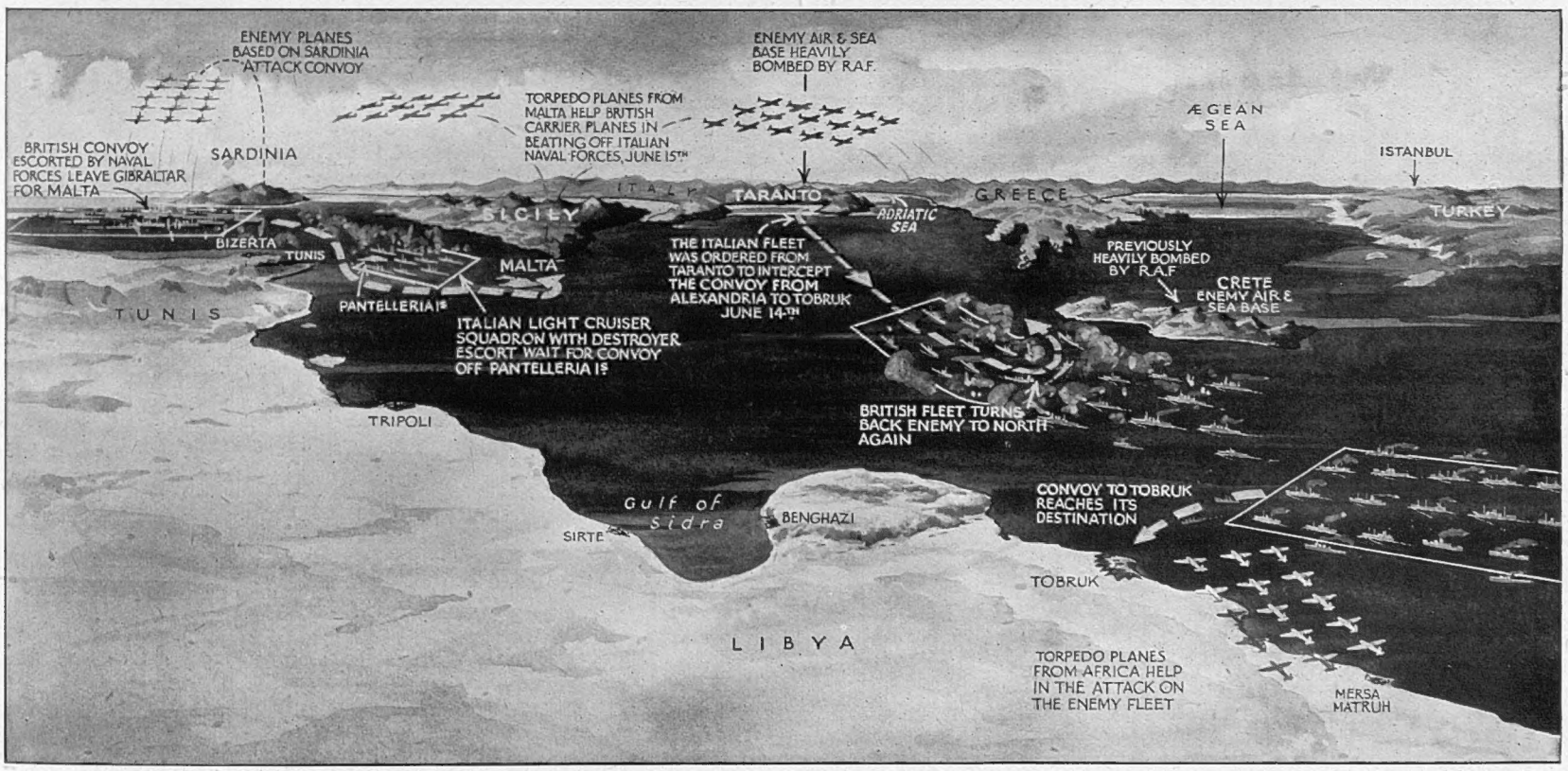
Ebb and Flow in Libya

		1941
Temporary Allied Victory	**British Offensive** against Axis positions	Dec. 13
		1942
Germans quit field of battle and then return	**Enemy rushes back to El Agheila**	Jan. 10
	Axis Counter-attack	Jan. 24
	Benghazi reoccupied by Axis	Jan. 31
	Germans back on advanced Libyan line — **El Mechele, Tmimi**	Feb. 21
Enemy resumes offensive	Axis resumption of hostilities against **British Gazala line**	May 30
	Enemy reoccupies Libyan Battle Area	June 18
	Fall of Tobruk	June 21

After all the severe fighting in Libya during the past few weeks, by last week-end the Eighth Army was again back on the Egyptian Frontier. The diagram-drawing above shows the various stages leading up to this withdrawal by General Ritchie. The old British Fortified Line from El Gazala to Bir Hacheim is shown on the left : eastwards is the Knightsbridge area, with its fortified "Box," which was abandoned when El Adem and Sidi Rezegh were captured by General Rommel, and Acroma abandoned. Part of the Eighth Army shortly afterwards took over the defence of the Tobruk stronghold, whilst the main portion of General Ritchie's Army retired back to the Egyptian Frontier. On Sunday last came the news of the fall of Tobruk and the German occupation of Pardia.

Whilst the battles were raging by land it was decided to send urgent supplies through to Malta and to Tobruk by sea, despite the risks involved. The Malta Convoy went through the Narrows from Gibraltar ; the Tobruk Convoy went from Alexandria. The vicissitudes of both are depicted in the drawing below. Both Convoys got through, but the British forces suffered certain losses : on the other hand, the Italian Navy put to sea in an effort to interfere. In the result one of their cruisers and two destroyers were sunk, and two battleships and two cruisers and two destroyers were damaged. Once again, aircraft played a very large part in determining the course of the action.

GENERAL RITCHIE AT HIS ADVANCED HEADQUARTERS : With him are his two Corps Commanders—Lieut.-Gen. Willoughby Norrie (second from left) and Lieut.-Gen. ("Strafer") Gott (fourth from left)



THE MEDITERRANEAN CONVOYS : One for Malta passed through the Narrows at the western end ; whilst another, from Alexandria, fought its way through to Tobruk. It was during the progress of the latter that the Italian Fleet emerged from harbour and took a severe battering from the Royal Navy. Both Convoys got to their respective destinations—*Drawing by E. G. Lambert*

THE BATTLES IN THE DESERT

The Fighting at Knightsbridge which Preceded the Fall of Tobruk and the Retirement to the Egyptian Frontier

Actual pictures just received from the 8th Army, which show conditions during the very heavy fighting

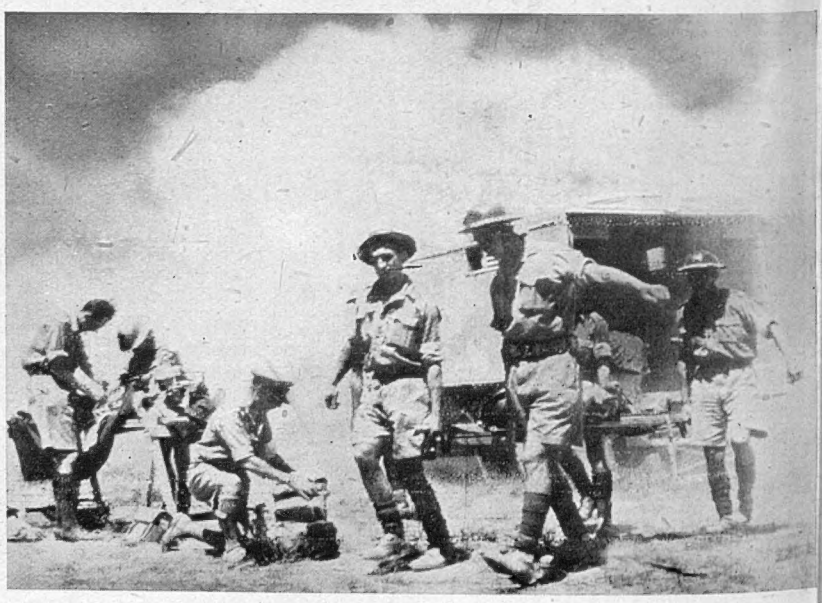
DIVE-BOMBING BY THE GERMANS : Two British soldiers take cover as Stukas (seen at the very top of the picture) come over seeking a target on which to unload their bombs

IN THE KNIGHTSBRIDGE AREA : The interior of a Gunnery Command Post in the forward area. When this picture was taken messages were being received and positions were being plotted

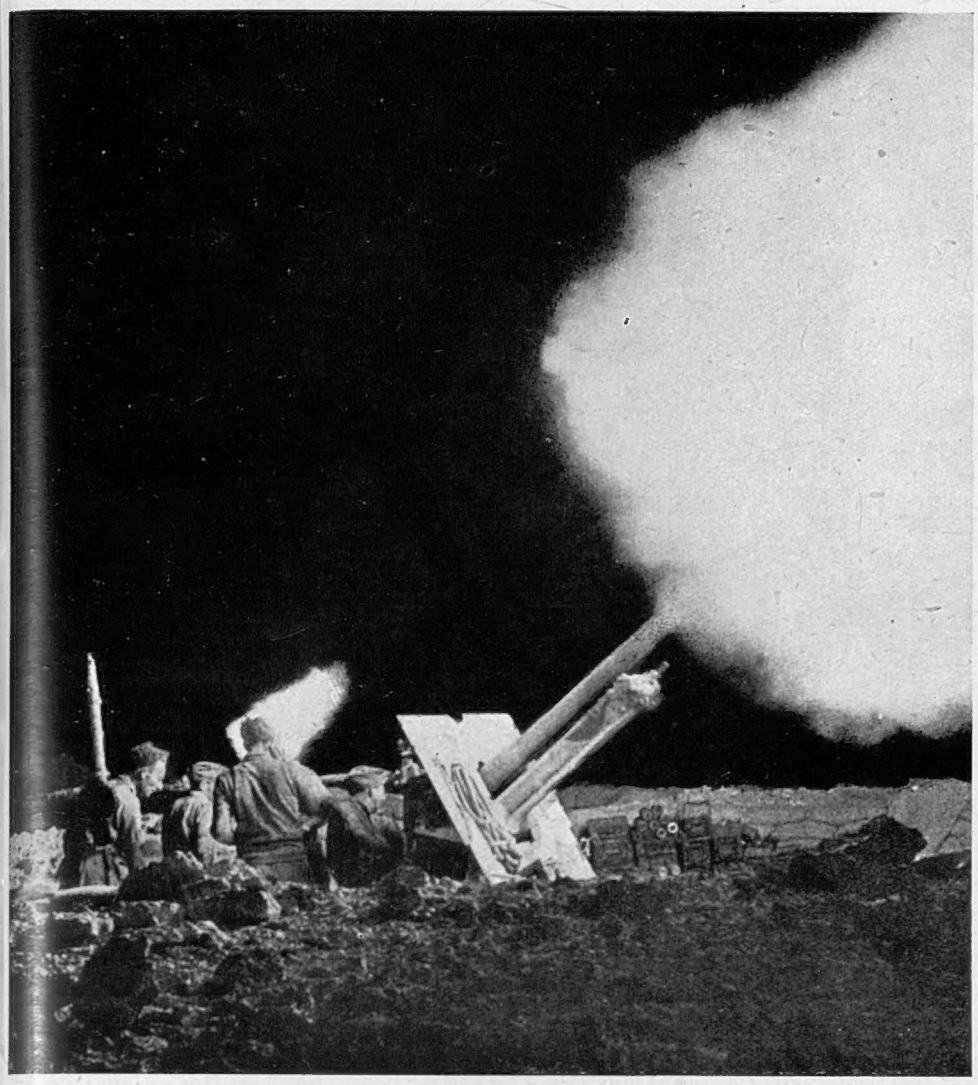
A BRITISH CONVOY GOES THROUGH : One of the troop-carriers is here driving towards a desert battlefield—the troops going into action are seated at the rear of the vehicle

MOTORISED INFANTRY MOVING UP IN WELL-SCATTERED LORRIES : The drivers must wear goggles on account of the dust. The leading vehicles have to keep a sharp look-out for enemy vehicles, minefields and aircraft, with all of which the desert abounded

IN THE KNIGHTSBRIDGE AREA : A British soldier takes cover behind the remains of a wrecked vehicle during an attack by dive-bombers. Bombs from the aircraft have just burst in the distance



THE CARE OF THE WOUNDED : R.A.M.C. stretcher-bearers and medical officers working in the heat and dust of the desert. Note the ambulance on the right from which wounded are being carried



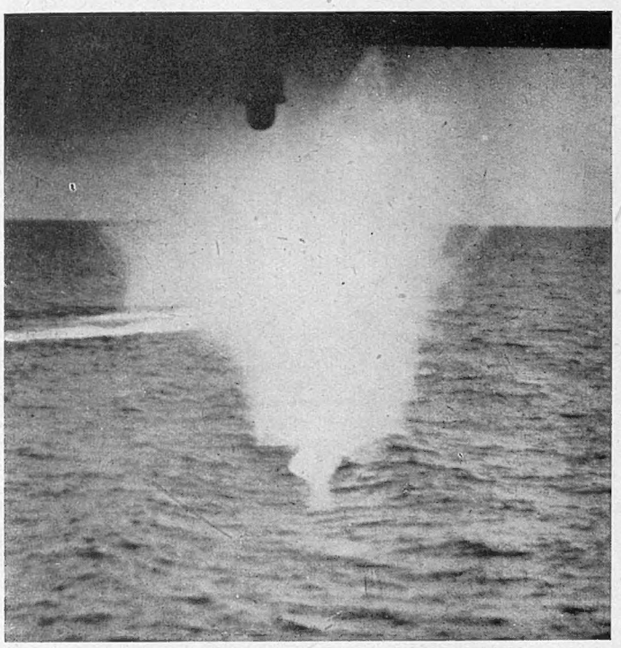
NIGHT BROUGHT BUT LITTLE RESPITE to the artillery during the heavy fighting : Throughout the hours of darkness the famous 25-pounders of the Eighth Army continued to blaze away at the enemy columns and infantry

A CAMERA-MAN RIGHT IN THE BATTLE-ZONE filming a British bombardment during the Libyan fighting: He was guarded against a surprise attack by a Bren gunner

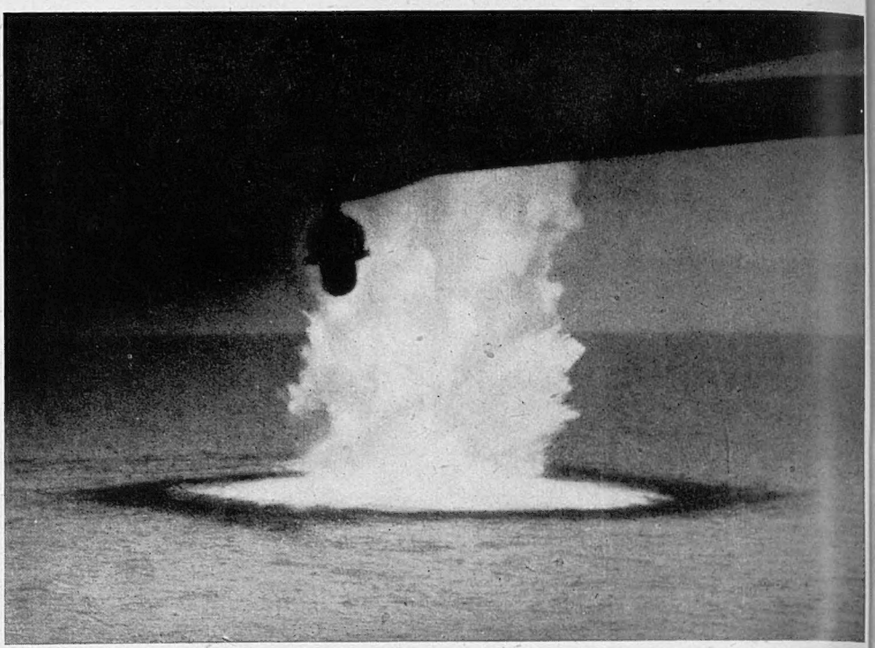
AN ENEMY VEHICLE LEFT BEHIND BY THE GERMANS at Sidi Rezegh : It will be observed that this armoured car is half-tracked, half-wheeled, and has been fitted with radio

BACK TO THE TOBRUK PERIMETER DEFENCES : After the retreat to the Egyptian border, a garrison was left behind at Tobruk, but the town fell to the Germans last Sunday. This picture was taken in December last when soldiers of a Highland Regiment were manning firing positions captured from the enemy whilst Rommel was making his previous desperate attempt to bring about the town's downfall

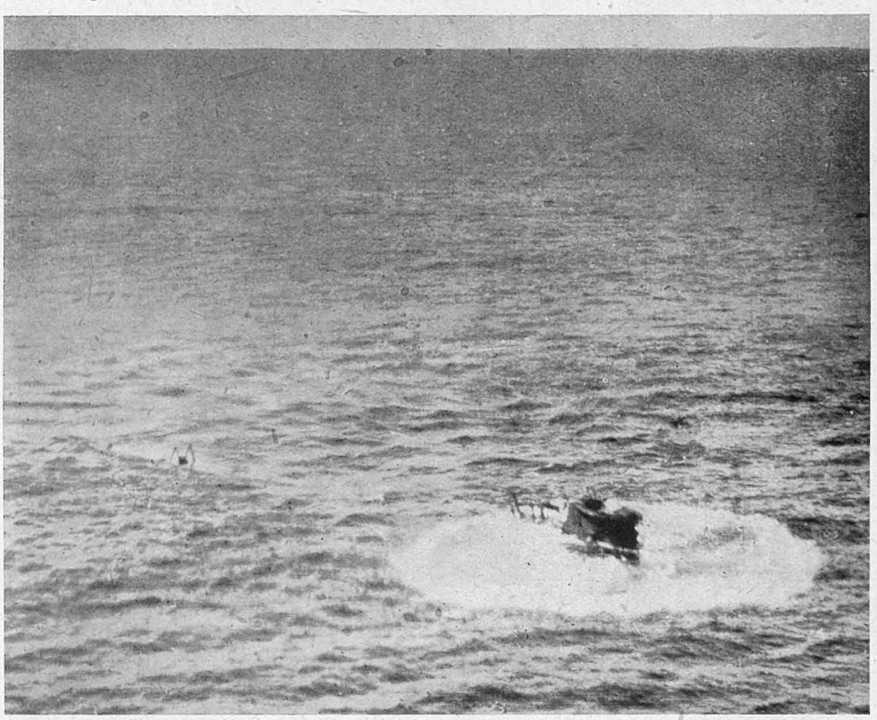
THE R.A.F. HUNT DOWN THE U-BOATS: A Series of Official Air Ministry Photographs



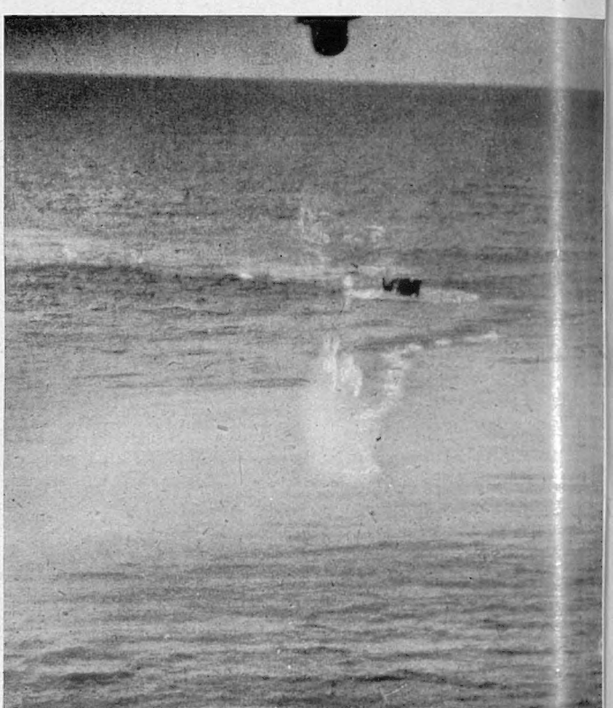
1. A WHITLEY LOCATES A SUBMARINE IN THE BAY OF BISCAY: Diving to the attack, the bomber straddles her with a stick of bombs



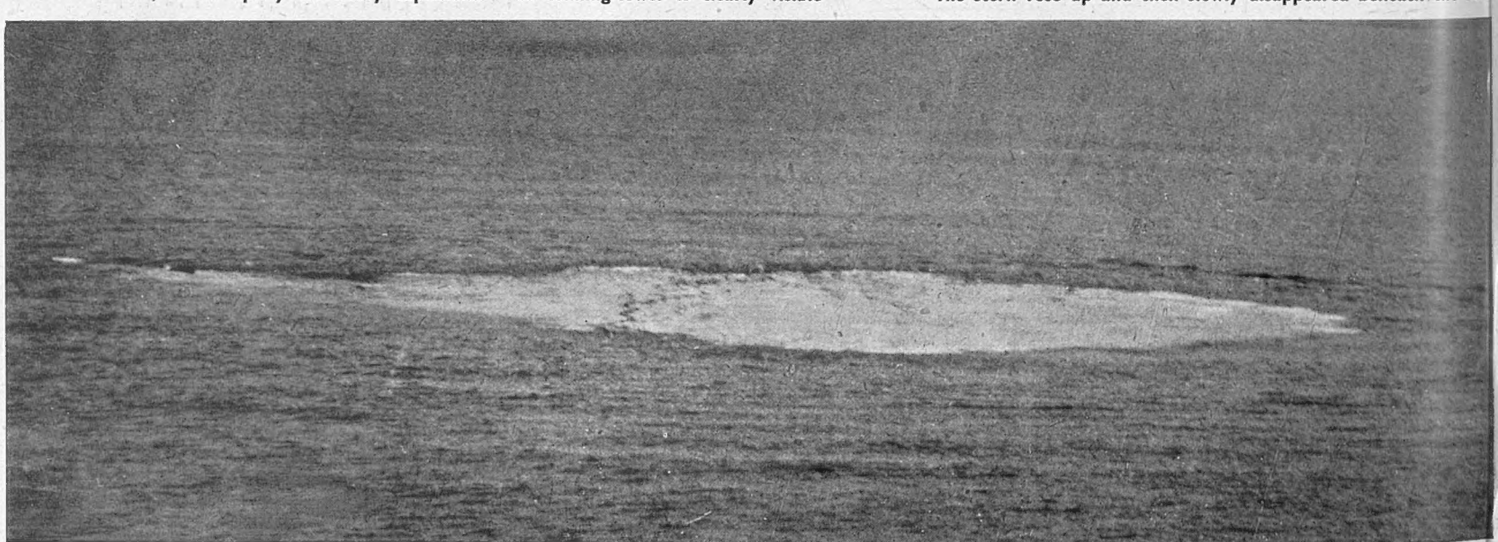
2. AND THEN THE BOMBS EXPLODE JUST OVER THE TARGET, throwing up a huge column of water. What happens next is graphically portrayed in the three pictures below



3. TWO MINUTES AFTER THE WHITLEY'S BOMBS HAD EXPLODED: The U-boat rises to the surface, forced up by the heavy explosions. The conning-tower is clearly visible

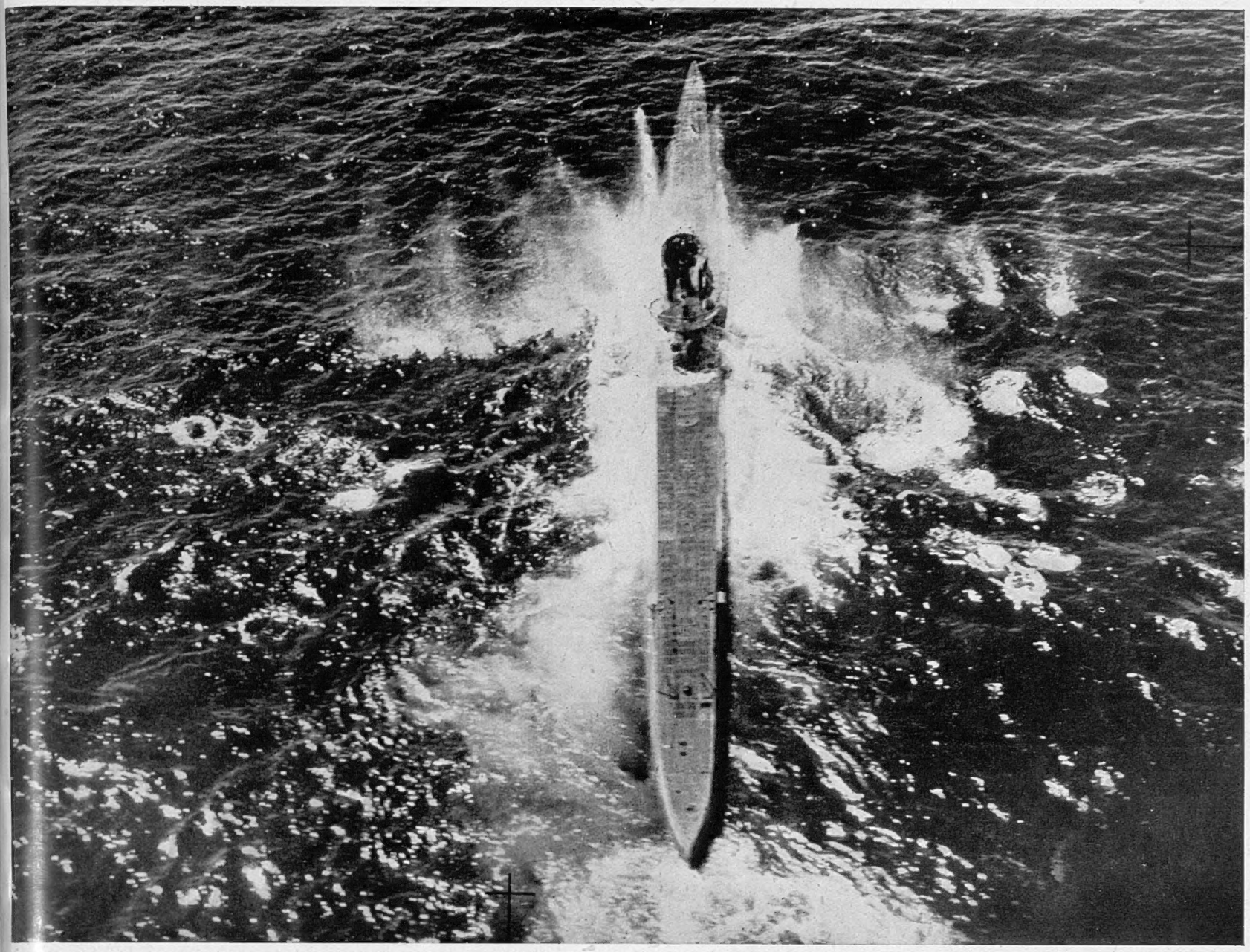


4. THE WHITLEY'S REAR-GUNNER SPRAYS THE U-BOAT WITH BULLETS: The stern rose up and then slowly disappeared beneath the sea



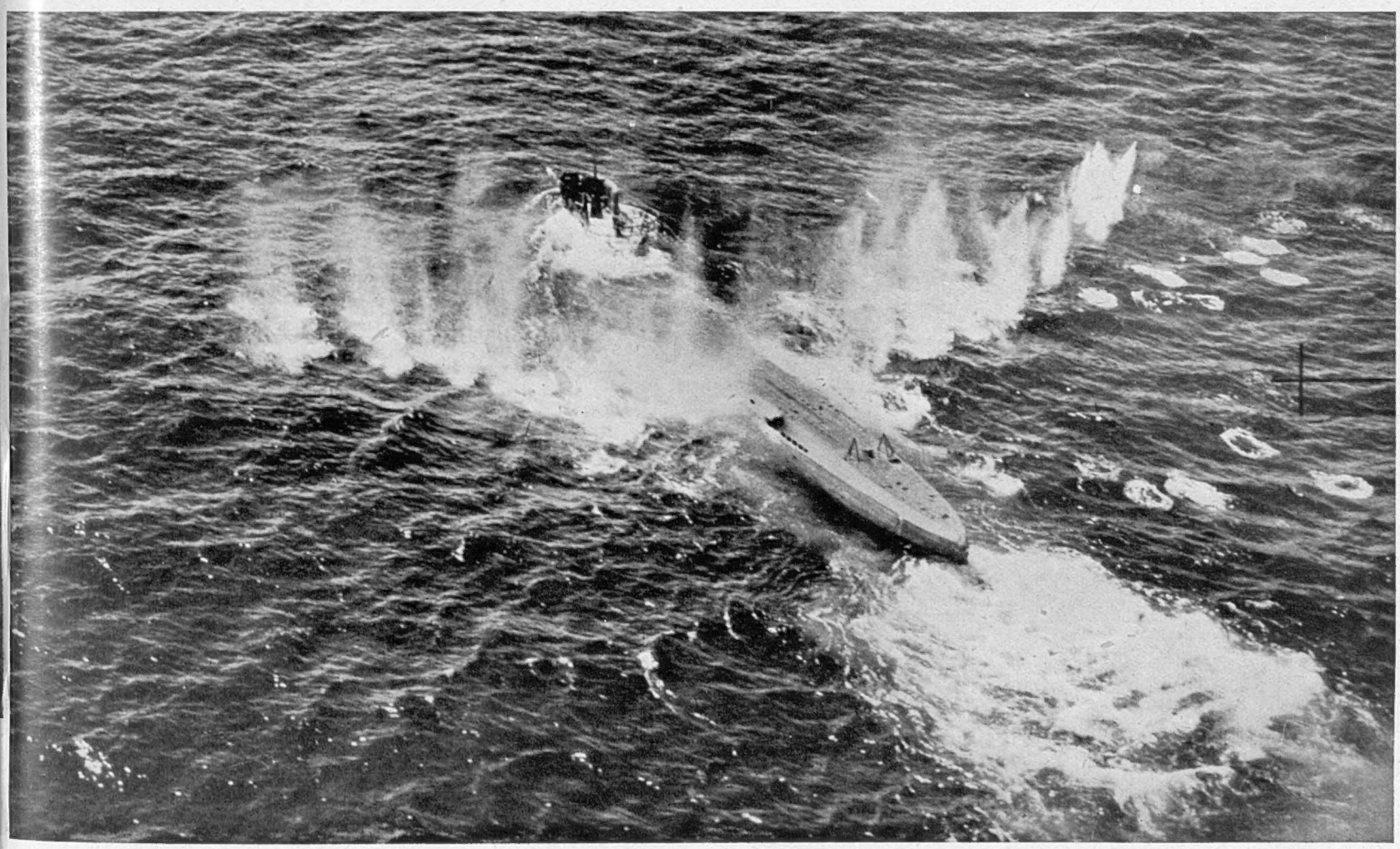
5. THE END OF STILL ANOTHER U-BOAT: A large patch of oil, nearly 200 yards in diameter, spreads over the spot where the submarine sank, and air-bubbles also rise to the surface, denoting the vessel's final destruction

The pictures reproduced above were taken over the Bay of Biscay from a Whitley bomber of the R.A.F. Coastal Command during an anti-submarine patrol in an area known to be infested by U-boats. They show how British aircraft carry out a ceaseless hunt for enemy under-water craft, and what happens when one is located. Having marked down its target, the big bomber at once dived to the attack, releasing a stick of bombs which straddled the submarine. Two minutes after the explosions the vessel surfaced, having been forced up by the terrific concussion. The rear-gunner of the bomber then took a hand, spraying the doomed vessel with a deadly hail of lead, which rattled against the conning-tower and hull. The stern of the submarine rose up until it was almost vertical, and then slowly disappeared. At the end, only the large oil-slick marked the spot where the U-boat had slipped down beneath the waves

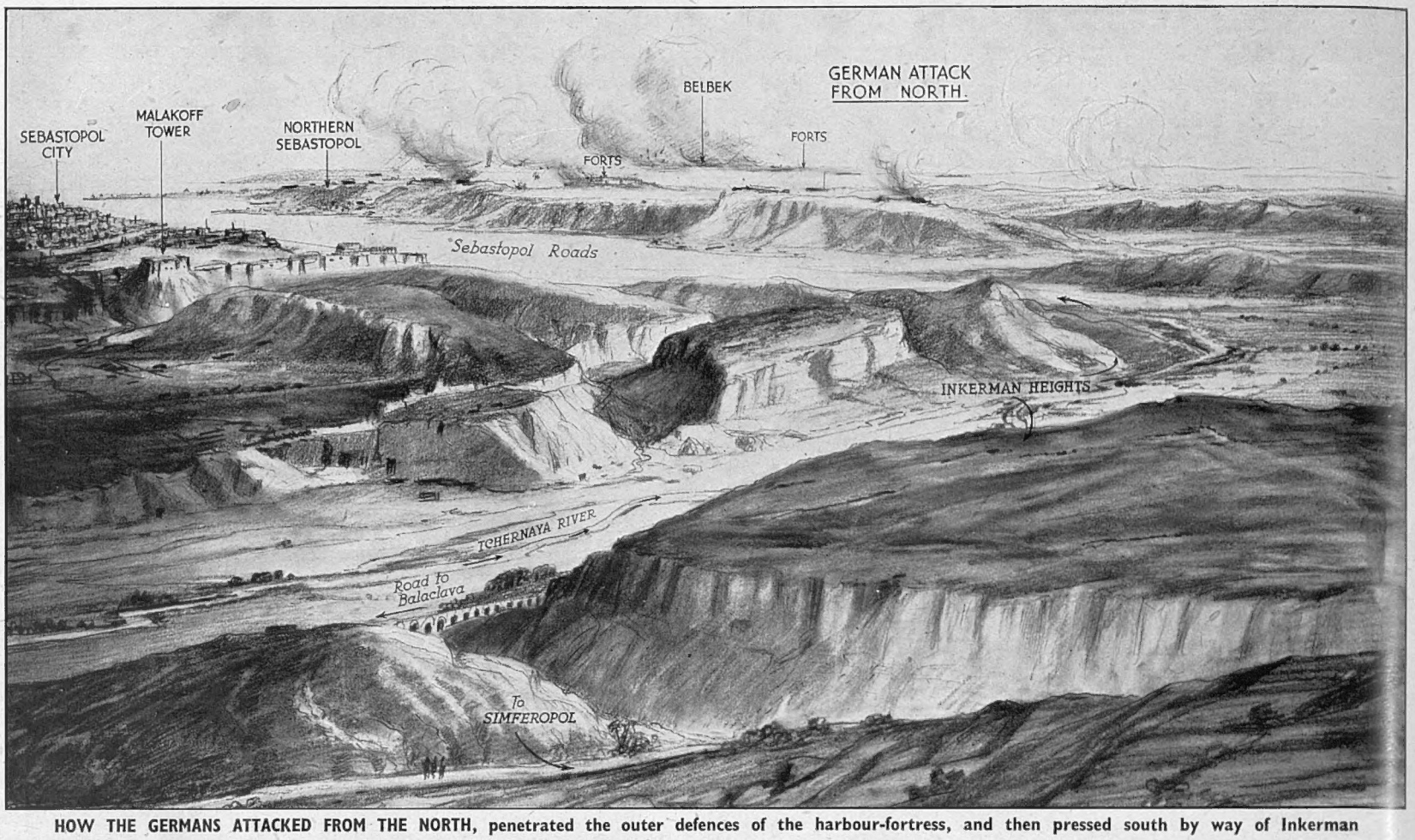


SUNDERLAND FLYING-BOAT VERSUS ENEMY U-BOAT: Two pictures showing the effects of an attack on a would-be Atlantic commerce raider by one of the big flying-boats operated by the Coastal Command, R.A.F.

Caught in the Bay of Biscay whilst on its way to raid shipping in the Atlantic, the U-boat seen in the two pictures on this page was forced to the surface by bombs from a Sunderland flying-boat of the R.A.F. Coastal Command, and forced to turn back badly damaged. Frantic efforts were made by her crew to get the U-boat to submerge, whilst her deck-gun opened fire on the Sunderland. The latter, its bombs gone, could attack only with its guns, and its fire raked the decks and conning-tower of the submarine. Finally, the U-boat submerged, leaving behind her a wide trail of oil. Suddenly the oil-trail stopped, and oil gushed to the surface and spread in a widening pool

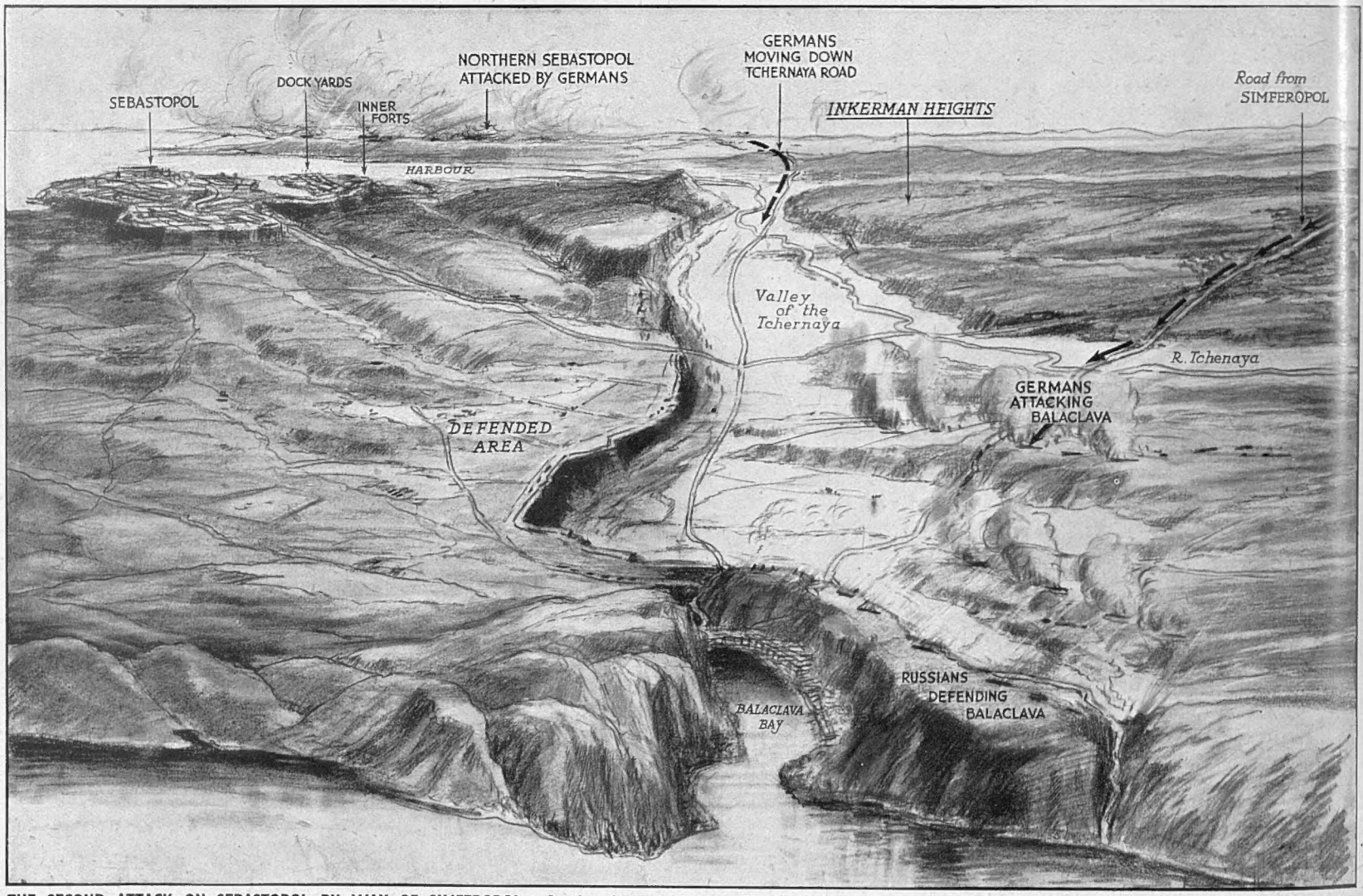


The GERMAN ASSAULT upon SEBASTOPOL: The Strategic Position Explained in Diagram



HOW THE GERMANS ATTACKED FROM THE NORTH, penetrated the outer defences of the harbour-fortress, and then pressed south by way of Inkerman

The German assault on the fortress of Sebastopol developed principally against a fortified line protecting that part of the harbour-fortress which lies on the northern shore of the Roads (or Harbour, as it is variously called). At the end of the third week of the grand assault, the Germans had penetrated the northern string of forts and positions of strength: Nature assisted the defenders here by reason of the rocky nature of the ground. The northern shore is steep along a good part of its length: no coast road runs along its base. About a mile of water separates it from the southern shore, at the western end of which lie the city of Sebastopol and the dockyards. This area used to be protected with an inner line of massive, stone-built bastions and redoubts. To reach the southern shore, it is necessary to march along the cliff tops to the neighbourhood of Inkerman and the estuary of the River Tchernaya. Here the country seems to form itself into a series of natural bastions lying at the head of ravines and gullies leading back to the inner lines of Sebastopol's fortifications. The valley of the Tchernaya continues southwards to Balaclava, which lies on the southern shore of the Crimea



THE SECOND ATTACK ON SEBASTOPOL BY WAY OF SIMFEROPOL: Coming by road through the latter place and across the Heights of Balaclava, this attack synchronised with the other German attack on the city made from the north—*Two diagram-drawings by Percy Home*

In the immediate foreground is the landlocked harbour of Balaclava, a famous position in the Crimean War of 1854-55. To the east rises a range of hills which provide a natural line of defence. From their northern end, one looks up the valley which terminates just beyond the Inkerman Heights. The valley is guarded on the west by steeply-rising hills, which also provide positions which can be held by a determined defensive force. The roads passing down the valley can be swept by fire from the high ground to the west. The two ranges of hills commanding the course of the valley appear to have been captured by the Germans during the recent fighting for the express purpose of bombarding Sebastopol. There is a main south-and-north road leading from Balaclava to Sebastopol, and another to Simferopol, where some earlier resistance was met. The Tchernaya bends eastward. At the base of the north-easterly hills four main valleys lead off to the line of the inner fortifications, so heavily and continuously bombarded by the Germans

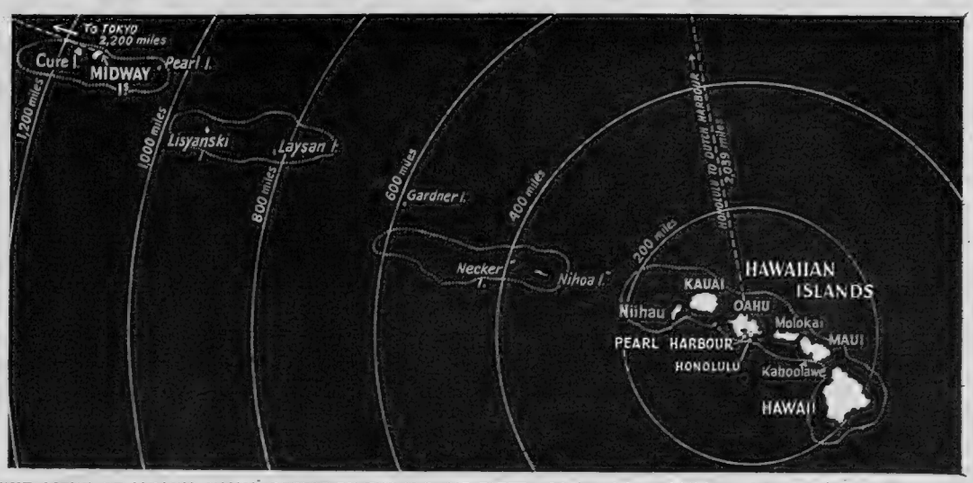
The BATTLE off MIDWAY ISLAND

The U.S. and Japanese Air Fleets Join Action in the North Pacific, with Disastrous Results for the Enemy

A Special Sphere Section, with Drawings and Diagrams from Eye-witness Reports

THE battle off Midway Island was the culmination of the longest, strangest naval action of the present war; during its course, all the damage was inflicted by aircraft, and the opposing surface craft never engaged each other directly and discharged only their anti-aircraft guns. At one stage a duel developed between two carriers, each using her planes to attack the other—the first action of its type in history!

According to subsequent reports from Chungking, the Japanese forces at Midway comprised some 54 vessels, made up as follows: 4 battleships; 4 to 6 aircraft-carriers; 4 heavy cruisers; 5 light cruisers; 3 seaplane tenders; 34 destroyers, and 200 aircraft. Out of these, Admiral Chester Nimitz, U.S. Commander-in-Chief of the Pacific Fleet, has given the following details of the vessels destroyed or damaged in the action: 2 or 3 **Aircraft-Carriers** destroyed, and 1 or 2 badly damaged (and most of their aircraft lost); 3 **Battleships** damaged, at least 1 badly; 4 **Cruisers** damaged, 2 heavily; 3 **Transport Ships** damaged. "It is possible," added Admiral Nimitz, "that some of these wounded ships will not be able to reach their bases." The Americans had one carrier hit, and some American aircraft were lost. But "American casualties have been light."



THE SCENE OF JAPAN'S NAVAL DEFEAT BY THE U.S. AIR FLEET: The position of Midway Island, at the north-west end of the Hawaiian group of islands and 1,200 miles from Pearl Harbour

Extending from Hawaii out into the Pacific are four principal groups of islands, the farthest of which is that of Midway—1,200 miles from Pearl Harbour on the one hand, and 2,200 miles from Tokyo on the other. The islands have a total area of 28 square miles; before the war the population was only 35, and the administration was in the hands of the U.S. Navy Department. In recent months the island defences have been greatly strengthened. It was to the assault of Midway that the Japanese despatched the fleet which was so roughly handled by the U.S. Navy, as described on this and the following pages

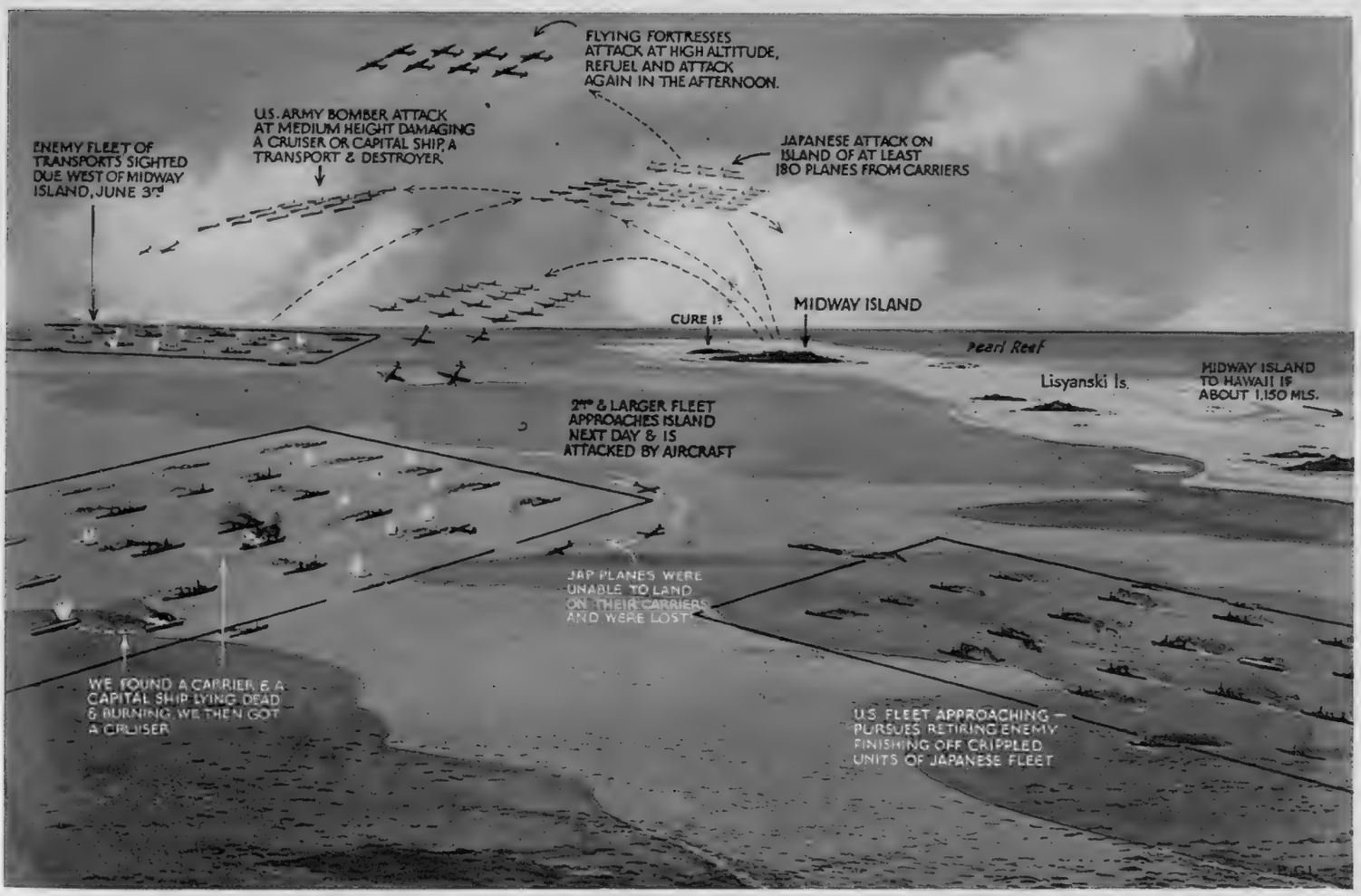
The first day of the battle was June 3, when two "huge" Jap fleets were first reported to be approaching Midway. One of the fleets, composed mainly of transports, was coming from the west: the other—the Battle Fleet—was coming up from another direction, as indicated in the large drawing on this page.

U.S. Army pilots, in Flying Fortresses and Consolidated bombers, at once went to the attack: they severely damaged a heavy cruiser (or battleship), scored direct hits on a transport which was so big "that it looked as if it belonged to the Normandie class," and probably sank a destroyer. Early next morning the bombers returned to the attack. "We saw the battle line with destroyers outside, then cruisers and battleships and carriers. We picked the biggest carrier," said Colonel Sweeney. "There were more than twenty ships in columns, with the big ships in the centre. We circled westward and came in with the sun at our backs. When the Japs sighted us they immediately deployed, each ship turning individually and trying frantically to avoid attack. We picked out the biggest ships as targets and laid our bombs in a pattern."

The heavy U.S. bombers found the Japanese battle fleet again late in the afternoon of June 4. One carrier was burning and one capital ship. "They were lying dead," said Colonel Sweeney, "not making any headway, and they were obviously badly damaged. No undamaged carriers were visible, so we picked out the biggest ship we could see—a heavy cruiser. One bomb struck it directly amidships." Surface craft then came up to finish off the crippled Jap units.

When the planes flew back to Midway Island they found it had been bombed by Japanese aircraft: these had obviously avoided hitting the runways, probably believing that their own planes would be using them later! The first Japanese attack, made from aircraft-carriers, lasted nearly forty minutes, with at least 180 machines taking part.

As the U.S. bombers returned, the ground crews on Midway worked on them at top speed. It was feared that the enemy would come back before they could be got into the air again. "This was the critical period of the entire battle," said the U.S. Commander. "But the enemy did not come: they were too busy protecting themselves."



HOW THE MIDWAY BATTLE DEVELOPED: One of the fleets was composed mainly of transports: it was sighted on June 3. The other—the Battle Fleet—came from another direction and was sighted the next day. The main attacks by the Americans were delivered from the air, as indicated above, with the Fleet coming up to finish off the crippled enemy units and pursue the retreating Japs—*Drawing by E. G. Lambert* (see *article on this page*)

THE BATTLE OFF MIDWAY ISLAND *(continued)*

THE LARGEST JAPANESE AIRCRAFT-CARRIER BOMBED BY U.S. AIRCRAFT AND ON FIRE: This was the spectacle witnessed by Ensign Gay from his dinghy when the battle was at its height, as related below. The Kaga class vessel depicted is a warship of 26,900 tons: it was originally intended to be a 39,000-ton battleship. The destroyer in the foreground is a typical two-funnelled Japanese vessel of the 1937 period—*Drawing by Wm. McDowell*

Ensign Gay is a young U.S. pilot who went out to the attack of the Japanese fleet off Midway Island. This twenty-five-year-old airman came upon three aircraft-carriers, two of which were of the Kaga class, Japan's biggest. Against one of them he launched an attack by torpedo, and was then shot down into the sea: the rest of the action he witnessed from his dinghy in mid-ocean as he awaited rescue. One of the carriers was blazing fiercely before Gay was shot down; the other two were taking their aircraft back on board: both were protected by a great screen of cruisers and destroyers.

As he watched from his tiny dinghy, the U.S. ensign saw the two remaining carriers squarely hit by bombs. Tremendous fires burst from the vessels and great billows of smoke churned up, with flames shooting out from the tips of the black columns. Every few minutes explosions occurred inside and sent up new gushes of smoke. One of the Kaga class ships was certainly a total loss, while both other carriers were "probables": when he last saw them they were being pursued by American forces engaged on finishing off the crippled units of the Japanese fleet (see picture in *upper right*). It is noteworthy that this large aircraft-carrier was not once hit by surface craft: her destruction was brought about entirely by land-based aircraft.

The Kaga class comprised the largest aircraft-carriers in the Japanese Navy: they were 26,900-ton vessels, laid down about the year 1920. The *Kaga* herself was originally intended to be a battleship of 39,000 tons: the *Akagi*, of the same class, was intended to be a battle-cruiser of 42,000 tons. Both would normally carry about thirty aircraft, although the *Akagi could* carry fifty and the *Kaga* a maximum of sixty. Speed would be about 28½ knots.

ONE OF THE NEW AIRCRAFT-CARRIERS OF THE U.S. NAVY: The "Wasp," of 14,700 tons, launched in the year 1939 and commissioned in April 1940

This vessel was laid down in April 1936, and was then the seventh aircraft-carrier in the U.S. Navy. Since then many other aircraft-carriers have been provided for. The *Wasp* is 739 ft. long, 110 ft. in breadth, and has a designed speed of 29½ knots. She carries an anti-aircraft battery of eight 5-in. guns, and has a capacity of four squadrons of eighteen planes each—a total of 72 aircraft. The complement includes 73 officers and 1,105 ratings; but with flying personnel her complement is 1,800

On right—Not only did Ensign Gay witness the attack by U.S. bombers on the Japanese aircraft-carriers: he also was the only spectator of the dramatic incident depicted by Mr. Whitaker in the drawing reproduced here. After the huge Kaga class aircraft-carrier had been hit in the manner shown in the upper drawing on this page, and as the afternoon drew to a close, the Japanese made frantic efforts to help the huge vessel as she lay crippled and completely stopped, with flames belching from her and explosions occurring within the hull. A cruiser tried to come alongside, but seemed unable to get close enough, so she opened up with her big guns, presumably to scuttle her. Some time later a destroyer managed to get close enough to take off survivors still on board.

All this time Japanese aeroplanes were hovering in the air above, with nowhere to land but in the sea or on the blazing decks of their smashed carrier—a very terrible predicament for the enemy pilots.

Crouched in his rubber boat, the young American pilot saw great glowing patches in the sky, which he guessed to be searchlights of Japanese rescue ships looking for survivors from the wrecked carriers. Several hours after the sun rose, a United States navy patrol aeroplane rescued Gay and brought him home.

AFTER THE DESTRUCTION OF THE KAGA CLASS AIRCRAFT-CARRIER (*see* picture on left), two other carriers which had accompanied the doomed vessel were seen to be making off, hotly pursued by American forces intent on finishing off the crippled units of the Japanese fleet. The destroyer in the foreground is one of the U.S. two-funnelled Ellyson class; and the vessel on the extreme left is a cruiser with the typical U.S. tripod mast—a rather elderly type of aircraft-carrying vessel likely to be used on such work as that depicted—*Drawing by Wm. McDowell*

THE MOST SPECTACULAR INCIDENT IN THE WHOLE BATTLE, as witnessed by a U.S. ensign who had been shot down into the sea. Ensign Gay had taken to his dinghy near the huge Kaga type aircraft-carrier: he saw the vessel hit squarely by bombs and blow up, whilst numbers of Jap planes circled in the air above like moths, unable to land on the carrier's blazing deck (*see notes on left*)—*Drawing by W. G. Whitaker*

A JAPANESE ARMED VESSEL OFF WAKE ISLAND DELIBERATELY APPROACHES A SUPERIOR AMERICAN NAVAL FORCE: The U.S. destroyer retaliates by putting a shell through the target, whilst a cruiser stands by. The enemy vessel promptly turned over and sank, her survivors being picked up by the destroyer—*Drawing by Wm. McDowell*

JAP NAVAL "DIVERSIONS" IN THE PACIFIC WAR

The Strange, "Wearing-Down" Tactics of the Enemy

They are Sending Out All Kinds of Small Armed Craft on Suicide Missions to Engage and Take Up the Time of U.S. Vessels Amongst the Pacific Islands

The two pictures reproduced here illustrate one curious aspect of the naval war amongst the Pacific Islands. It would almost appear as if the Japs were deliberately sending out small vessels—of any size and description, but all armed—in order to take up the time and attention of the U.S. naval forces in those waters. The two incidents illustrated here both occurred at Wake Island whilst a U.S. fleet was operating off that tiny atoll. The first vessel to arrive (see *drawing below*) was a converted copra-schooner of some 50 tons: the other (as in the drawing above) was a low-lying tramp-steamer of perhaps 1,000 tons. Such ships have been fitted out with an odd armament—a battery of 77's maybe, a couple of 4-in. guns, a bundle of depth-charges, or even a set of torpedo-tubes: their object obviously to harry and pursue anything less well-armed than themselves. When located, these craft make little attempt to escape—probably knowing their poor prospects of getting away once they are discovered. The converted copra-boat, for instance, tried to cut across the course of the 30-knot destroyer at a top speed of perhaps 8 knots. There could be no question of the result. "Maybe that is the strategy of these weird naval actions," writes an American commentator and eye-witness: "Sacrifice a pickle vat with an outboard motor and make the enemy use real shell to sink it. If you can put out enough vats and get them into enough battles you wear him down!" The second ship (see *above*) came over the horizon soon after. Nobody knows what made her skipper behave in this fashion. When a U.S. destroyer approached, the tramp promptly made off. She, too, was soon engaged and overturned and sank. The destroyer captain picked up the survivors and then tried to elicit "whether eagerness or badly-fitted eyeglasses caused Japanese patrols to toy with massacre." The American commander was unsuccessful in his efforts!

A CONVERTED COPRA-SCHOONER OF ABOUT 50 TONS RETURNS TO WAKE ISLAND WHILST AMERICAN VESSELS ARE STILL IN THE VICINITY: She made no effort to escape, refused to stop when challenged and was promptly engaged. "A lot of rubbish broke off from the little wheelhouse and went up in small, indistinguishable pieces: the gun buckled up and went overboard"—*Drawing by Wm. McDowell*

TOWNS AS FORTRESSES

Their Defensive Value Against Armoured Armies: Why They Should Not be Abandoned

A Note on Allied Strategy

by DONALD COWIE

A GREAT MODERN CITY OF ONE MILLION INHABITANTS: An aerial view of Barcelona, which played such a large part in the Civil War in Spain. This is the type of big city which, in the writer's opinion, would make a colossal "hedgehog" of resistance to an enemy armoured drive—like Sebastopol, and unlike Singapore!

TOWNS were always fortresses in the past, then artillery made them death-traps and armies preferred to stay in trenches outside; but the tank made armies think again—first, in the Spanish Civil War, when Madrid, Barcelona and other places stood like bastions against iron-clad columns and swooping sky-raiders alike.

The Second World War began with Poland: and Warsaw stood for a considerable period after all else had failed. No wonder the Germans dropped thousands of parachutists on Rotterdam and other Dutch cities at the beginning of their western offensive. They didn't want to be caught again. But the Allied High Command had not noticed about the new importance of towns, or was loth to have them smashed, or was just knocked off its pins. Possibly fortified French towns, and, above all, a defended Paris, might have delayed the German drive fatally. Possibly. . . .

Anyway, the Russians had learnt the lesson if others had not (apparently there was no plan to defend the Greek towns and cities one by one, despite the heroic stands made in some of them by our men), and when the *Wehrmacht* drove eastwards it encountered successive stumbling-blocks, like Kiev, Odessa, Smolensk, which did, in fact, so retard its advance that the whole time-table was upset, and, perhaps, the whole war lost. The great machine finally came to a fatal standstill outside—Leningrad, Moscow, Rostov, Sebastopol.

Then Japan started, and, successively, we allowed this new enemy, despite all lessons, to by-pass successfully all the towns of Malaya (hardly any fighting took place in any of them) and, at the last, to take a half-open Singapore in a few weeks. The war switched to Burma, Java; and where were the prolonged house-to-house struggles in Rangoon, Moulmein, Batavia, Mandalay and other places that might have given time for reinforcements to arrive, and so saved vast and wealthy countries?

Doubtless there were considerations that made such a policy impossible, or at least difficult and risky. But the fact has been established that fortified towns make vicious thorns in the side of the heaviest offensives. Consider Tobruk. Admittedly that had sea support, but what about Bir Hacheim, a fortified collection of mud huts? What about the various Abyssinian strongholds that enabled even Italians to hold us up for quite a long time? We should carefully examine the tactics of this new, or very ancient style of warfare.

Briefly, the point is that tanks, tank-guns and dive-bombers have made it almost impossible for defenders to stand long in the open or in trenches. Conversely, tanks, tank-guns and dive-bombers have been proved time and time again to be at a disadvantage when attacking labyrinths of bricks and mortar. Then there is the matter of the island of resistance, which is the only tactic open to a modern defender till such time as he can mount a counter-attack. These islands must be constructed in depth and heavily fortified. Cities, towns, villages provide admirable nuclei, as the Germans have demonstrated themselves with their "hedgehogs." Timoshenko did not retake Kharkov.

It is a simple matter of physics. Drive a number of tanks into a town and try, with them, to dig out the defenders from the houses and office blocks and cellars. Not only are you partially blind, with your gun-layers' and aimers' visions restricted to lamp-posts and walls, with occasional downstairs windows and doors, but you are, for once, terribly vulnerable. Not only can anti-tank artillery snipe at you from devastatingly close quarters, having the clear vision that you lack, but the crudest methods, such as the dropping of petrol bombs from roof-tops and upper windows, even the toppling over of coping-stones, can destroy you before you have had an opportunity to hit back. No wonder tank commanders never enter hostile towns if they can possibly help it. But tanks, of course, are not all.

There are also the dive-bombers, and the artillery, and the mechanised infantry. The first and second can, admittedly, reduce the bravest town in the long run to ruins. But the defenders have at least some protection, and, if they make good use of the cellars and various other underground places which abound in every built-up area, they have at least some *base* from which combat-teams can issue for forays, patrols and even counter-offensives. As for the attacking infantry, they are advancing without protection against defenders who have plenty.

The greatest difficulty for would-be British defenders of towns to overcome is their kindliness and/or economic sense. But it is kindest and it pays most in war to win the victory as soon as possible: bricks and mortar can always be replaced afterwards, but not men. The second big problem is the assessing of a town's real chances, based on considerations of location, stores, morale, and wide strategic issues. While it might have been strategically foolish, for instance, to attempt the defence of Mandalay, Rangoon might have been held for a useful period, half-surrounded as it was with water and furnished as it was with huge buildings and stores. On the other hand, native morale in Rangoon might have been a difficulty, and perhaps it was thought best to fall back on the vital Burma Road.

Similar considerations did not apply, however, to Singapore. Possibly the western portion of Singapore city might have been held for a long time, given pre-planning. But it was not so held, and when the Japanese finally took possession—whether this is true or not—they found the city in "good condition." It is a ruthless thought, but no city should be otherwise than in complete ruins when an enemy takes possession.

The subject must be studied from two angles now: from that of defending British towns and cities against a possible invasion, and from that of attacking continental built-up areas which the Germans will undoubtedly have fortified against our eventual coming. Good hints for both purposes may be obtained from the recent Crimea. Kerch fell—because it was a very open, flat town at the end of a narrow place, wherein the attackers concentrated a tremendous weight of land and air artillery. Sebastopol held out—because it had hills, many strong-points all around, and numerous great batteries of counter-artillery. The moral should be obvious.

It would be a good idea to study again historical battles in English towns, struggles at French and Russian barricades: above all, the thousand ways and means of converting narrow streets and crowded buildings into death-traps for whomsoever comes carelessly.

TWO PICTURES TAKEN DURING THE SPANISH CIVIL WAR, when the City of Madrid was converted into a huge fortress which was never conquered by General Franco's forces. *On the left*—Government troops are holding the Hospital of the University City; and *above* other troops are defending a massive street barricade

THE LIBYAN BATTLEFIELD: The Escape from Bir Hacheim

CAUGHT AT THE NOONDAY SIESTA HOUR! The surrender of an Italian force as the result of a surprise attack by a British light armoured column whilst the enemy were "resting" in the noonday heat. The Italians were engaged on the construction of gun emplacements and other field works—*Drawing by E. Byatt*

The comic incident depicted above concerned several hundred men of Italy's crack "Pavia Division," who had been sent out to prepare advance positions in front of the British lines. They were busy laying mines and digging gun-pits when they were spotted by our outposts. Immediately highly mobile forces, operating with a lorry-load of infantry, went out. It was high noon—a Libyan noon in the hot season—and the siesta-loving Italians were lying about taking things easy. The British force swept in on them from all sides. After popping off a few rifles and a machine-gun or two, the men of the Pavia Division surrendered to the small British force. The officers were greatly annoyed and more than somewhat excited, but the men seemed completely unperturbed. When they slouched into British divisional headquarters, a British officer went to send news of their arrival to Corps Headquarters by wireless telephone. He did not want the enemy to know immediately that their working-party had been captured, nor did he want to go to the trouble of putting his message into regular code for so small a matter. He promptly found a solution. "I have to report, Sir," he said, "that we have several hundred ice-creams to tea to-night." The British force, it is reported, suffered no casualties

GENERAL DE BRIGADE KOENIG, the Free French defender of Bir Hacheim, who emerged successfully with his troops. He is forty-four years of age; he fought with the Foreign Legion at Narvik and in France, and saw service in Eritrea and Syria

AN ENEMY TANK KNOCKED OUT IN THE DESERT: The Bren guns are held at the ready in case of a surprise by the crew. In the lower picture British soldiers are investigating closer. Note the water-bottles above

BRITISH INFANTRY DIGGING IN DURING A LULL IN THE BATTLE. Covered by the Bren gun, the soldier behind is scooping out a shallow defensive position for both

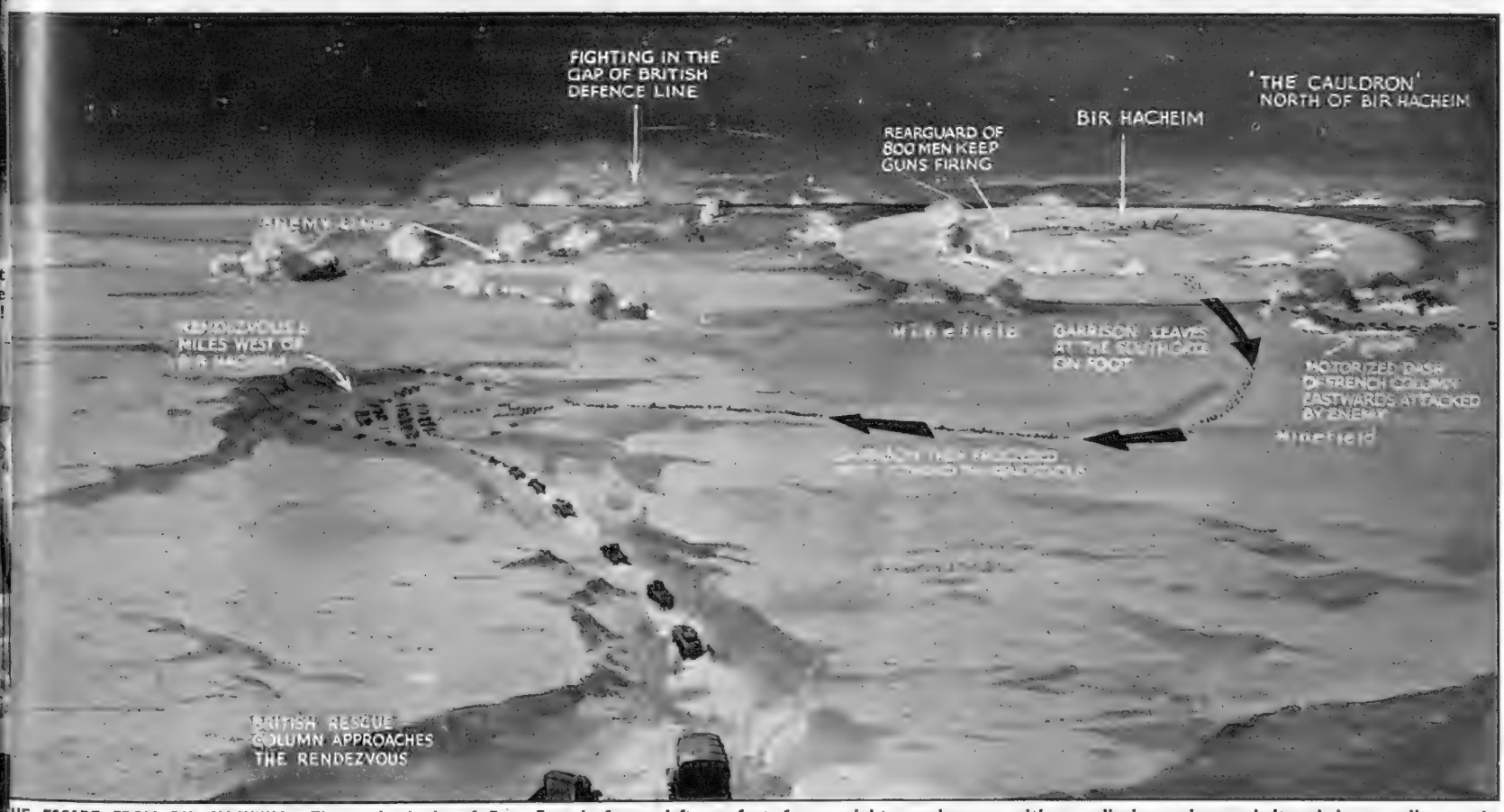
IR HACHEIM WAS HELD BY A MIXED FREE FRENCH BRIGADE UNDER GENERAL KOENIG : The position was just rocky enough to afford some shelter for the guns, flemen and armoured vehicles within the perimeter. In the later stages of the fighting, however, Rommel shelled the position with some of his heavy guns brought down from the north, and thus rendered Hacheim too difficult to hold

THE DEFENCE OF BIR HACHEIM

for Eighteen Days; And the Escape of the Defenders by a Secret Route

Two special Sphere *drawings by E. Byatt and E. G. Lambert*

When Bir Hacheim was attacked in great strength by the Axis forces, there were some 4,000 men in its original garrison. Amongst them were a number of tough members of the famous Foreign Legion : all were under the control of General Koenig, a Frenchman from Alsace. In the eighteen days of their defence, this force not only "contained" 10,000 enemy troops, but destroyed seventy tanks, many guns and eleven aircraft, and inflicted heavy casualties. When it became time to evacuate the position, "arrangements which combined simplicity with audacity, and which successfully bluffed the enemy, were completed well in advance by means of secret messages sent to General Koenig." It was arranged that, at the appointed hour—eleven o'clock at night—the garrison should file on foot through the narrow gap in the southern sector of the minefields, and march some six miles to the west. At this point a large number of lorries, furnished by the Seventh Motorised Brigade, were waiting, while the brigade's armoured cars, mobile artillery and other arms stood ready to beat off any possible enemy attack. Precisely at eleven o'clock the garrison started out, and those on foot—the majority of the garrison—reached the waiting lorries without being spotted by the enemy. They got in and were immediately driven off some miles to the west, where R.A.S.C. parties awaited them. In the meantime, a much smaller party of Frenchmen, in lorries and transporting some of their guns (including the 75's which have done so much damage to the enemy) were attacked and suffered a few casualties, but a considerable number got out safely



HE ESCAPE FROM BIR HACHEIM : The main body of Free French forces left on foot for a night rendezvous with a relieving column sheltered in a gully to the west. They got away without interference. But a second and smaller motorised force, also retiring—but to the east—was detected and attacked

IT IS POSSIBLE THAT THE SUNDERLAND CAME FROM THIS BAY IN WEST AFRICA: A picture from "The Sphere" of April 11, which showed how these huge flying-boats were using a small converted liner as a base and as a floating home in a West African bay. The principal task of this squadron is to guard shipping routes

A FLYING-BOAT TOWED FOR HUNDREDS OF MILES BY A BRITI
Atlantic, when a Sunderland stood up to 74 ho

A RECORD "TOW" IN THE SOUTH ATLANTI

A SUNDERLAND flying-boat which was forced to alig on the sea through engine trouble was recently towe hundreds of miles across the South Atlantic to its base i West Africa by a naval corvette.

No flying-boat had ever before been towed such a distan over the open sea. The tow lasted for 74 hours, during muc of which time there was a heavy swell and a cross wind, whic gave the flying-boat a terrible buffeting. One night there wa a tropical electrical storm. In spite of this, the flying-boa was brought back to its base unharmed—a great tribute t the toughness of the aircraft.

The Sunderland was on escort duty over the South Atlanti when the engine trouble developed. Its captain just manage to maintain sufficient height to get him near to a corvett That was the beginning of the long journey.

At first a thick rope was used for the tow, but after a whi it parted. The rope was reconnected, but it parted again, th time just as dusk was falling and a heavy sea was getting u In the gathering darkness a steel hawser was then cast aboar the flying-boat and fastened to the main spar, and the journe continued.

"The first night was the worst," said the captain of th Sunderland when he got back to his base. "There was a stron wind, with several rainstorms and a fair bit of lightning. Som times we could not see the corvette which was towing u although she was only 300 yards ahead. In the morning th

TI: CORVETTE: A "world record" recently established in the South os of buffeting in the open sea—*Drawing by Montague Dawson*

wind and the swell dropped noticeably, and throughout the following day and night—our second night on the water—we made a good speed.

"During the morning of the third day, though, the wind freshened and the Sunderland began to plunge very heavily and to make water forward. That night, with a rough sea and a strong wind, we had to reduce speed and just crawl along, and the flying-boat really took a terrific buffeting. We put out three dinghies on the main plane, in readiness if the Sunderland sank. The fourth day the going became a lot easier, but by then we were wondering just how much strain had been put on the Sunderland, and whether she would stand very much more. However, she came through splendidly, and the corvette handed us over to a pinnace when we reached our base."

The Sunderland crew arrived home weary and unshaven, but unharmed, although for 74 hours they had been buffeted about in the most violent manner, often wondering if they would have to scramble out of a sinking aircraft and take to their dinghies.

They had been supplied on the journey from the corvette. Every morning they received a signal by Aldis lamp, asking what food they needed, and they signalled back their "order for groceries" for the day. Then the corvette drew them almost alongside, and floated the supplies down to them on a rope. Two kegs of water were sent across in the same way, and—a most thoughtful attention—a toothbrush and a tube of toothpaste.

The result of this patient effort by the crews of the corvette and the Sunderland is that a valuable flying-boat which would otherwise have been lost to the R.A.F. is now safely back at its base, and will soon be fit for flying again.

A SUNDERLAND FLYING-BOAT ON PATROL OVER THE SEA: A fine impression of the largest aircraft operated by the R.A.F. for ocean-going and patrol duties

THE PRIME MINISTER WITH THE TWO LEADING COMMANDERS IN THE SOUTHERN HEMISPHERE: Mr. John Curtin is on the right; with him are General Douglas MacArthur (C.-in-C. of the United Nations Forces in the South-West Pacific) and Lieut.-General Sir Thomas Blamey (Commander of the Australian Defence Forces and Australia's most famous soldier). This picture was taken just after the Premier had attended a Staff meeting at General MacArthur's Headquarters

AN ANZAC CONVOY PAUSES FOR A MEAL: A picture taken along the great south-to-north road on the way to Darwin, Australia's strategic outpost in the north. This road is now the axis about which Australian defence revolves

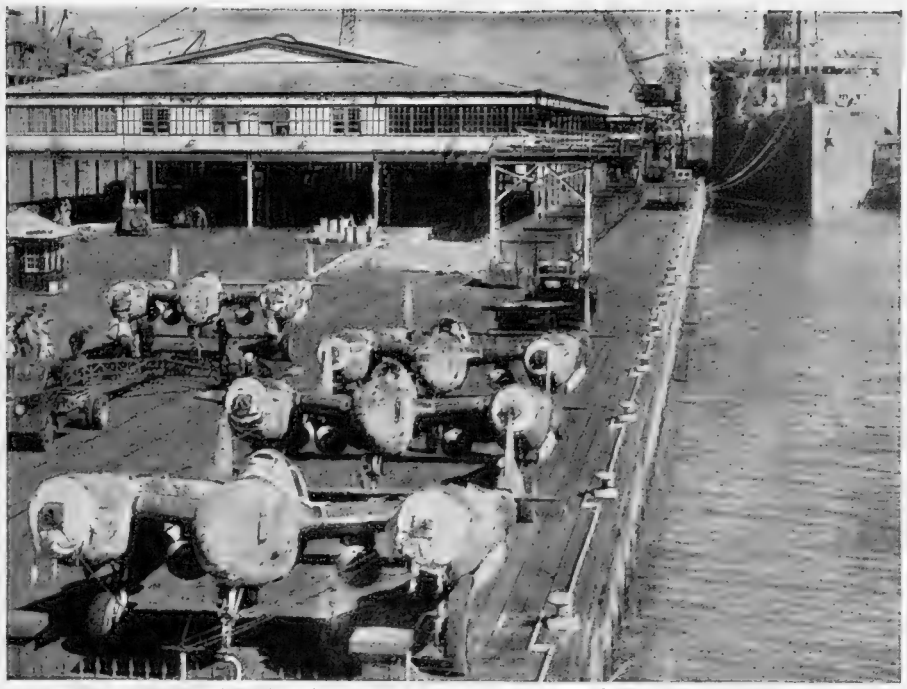
AT THE AERODROME AT ALICE SPRINGS: A Flying Fortress of the U.S. Army being refuelled at a point along the great road through the desert. There has always been an aerodrome here, but its importance is now magnified

THE STRATEGIC TOWN AND PORT OF DARWIN, ON THE NORTHERN COAST OF AUSTRALIA: A VIEW OF THE MAIN STREET. Civilians have been evacuated from Darwin, and the town has been turned into a first-class military and naval base

Since the appointment of General MacArthur as C.-in-C. of the South-West Pacific, American aid for Australia has been on a large scale. Men, munitions, ships, aircraft—all have gone to protect the great island-continent against the Japanese menace. From north to south, through the desert country, runs the great strategic road to Darwin: the latter is a key-point in the Australian defence scheme, and must be kept supplied. All civilians have been evacuated, and its barracks and aerodromes are now places which the Japs bomb as frequently as conditions permit. The number of U.S. soldiers in Australia must now be considerable; their aircraft (brought over with each convoy) are beginning to fill the skies; and their ships have already been in damaging conflict with the Japs—as in the case of the Battle of the Coral Sea. The pictures reproduced here have all been received within the past few weeks

THE DEFENCE OF AUSTRALIA BY THE U.S.

AMERICAN TROOPS AND WARPLANES ARRIVE: The latter are stowed on deck in the manner shown. They are capable of being assembled very quickly after landing. Troops have been transported from the United States to Australia by the thousand



HOW THE BOMBERS ARRIVE: In the background is one of the big troopships in which U.S. reinforcements have been transported across the Pacific. Very soon these twin-engined aircraft will be flying in defence of the Southern Continent: numbers of them are already in fighting trim and have been in action at various points

THE SINEWS OF WAR: Guns, ammunition and other warlike material piled on the dock-side. The transport in the background was only one of a great convoy of men and materials safely ferried across the Pacific under escort of the U.S. Navy

A BIG AMERICAN FLYING-BOAT passing over one of the transports of a U.S. convoy she helped to protect on the route to Australia. The flying-boat wears the wartime markings of the U.S. Navy Air Force

THE U.S. ARMY SETTLE DOWN IN AUSTRALIA: A canvas encampment set up on a converted racecourse. Camps like these are now going up at many strategic spots on the Australian continent to house the thousands of U.S. soldiers being sent across for the defence of that vast country and its vital supply routes

A WONDERFUL WORK OF RECLAMATION IN THE FENS

HOW THE FEN DISTRICTS HAVE BEEN DRAINED, by means of big ditches such as the above. The King and Queen stopped here to talk to labourers at work

EIGHT FEET ABOVE THE LEVEL OF THE SURROUNDING COUNTRY. The royal party chug along the Burwell Lode, a drainage canal some feet above the level of the Cambridgeshire Fens

A PARTY OF LAND-GIRLS, now engaged on the cultivation of the reclaimed Fenland areas, cheer as the King and Queen go by. Later their Majesties talked to some of these women

The King and Queen have just paid a visit of inspection to one of the country's greatest land-reclamation works—in the Cambridgeshire Fenland districts at Swaffham Prior and Burwell. Here an expanse of 5,000 acres of fertile land lies many feet below the high-tide level: most of it had been derelict for many years, and formed the reedy wilderness known as Swaffham Prior Fen and Adventurer's Fen. Two years ago work began at Swaffham: later, work was begun on other areas. To-day, 2,400 acres are being cropped—1,000 of them with potatoes, 750 with sugar-beet, and over 300 each with wheat and barley. This whole areas lies 16 ft. below high-tide level at King's Lynn: water pumped into Burwell Lode therefore flows down to the Wash. The King and Queen were accompanied by Mr. R. S. Hudson, Minister of Agriculture, and by the two Under-Secretaries, Mr. Tom Williams and the Duke of Norfolk. For part of the way the royal party rode in a goods barge along the lode, or canal, high above the surrounding land. A year ago, the only traffic ways were soft black peat droves impassable for more than half the time: to-day, there are concrete roads 9 ft. wide. The party watched a great variety of work in progress, and the King and Queen talked with farmers and land-girls and officials employed on this great work of reclamation

A GENERAL VIEW OF A PORTION OF THE RECLAIMED LAND, with land-girls at work. Young corn and sugar-beet are now growing on fertile soil over a large part of the 5,000 acres of Swaffham Prior Fen and Adventurer's Fen, which were formerly a reedy wilderness

THE DANGER OF THE AIRBORNE TORPEDO TO THE BIG CAPITAL SHIP has been demonstrated so often in this war that the U.S. Navy have now decided to press on with the construction of more aircraft-carriers even if this affects the building programme of the capital ships. The picture above shows a Bristol Beaufort torpedo-bomber in action against an enemy battleship: in this type of aircraft the torpedo is carried internally; and in the latest types it has been stated that the bomber can approach to within 200 yards of her victim before releasing the deadly missile—*Drawing by Wm. McDowell*

The GREAT NAVAL QUESTION—
Warship versus Bomber

Or, is the Surface Craft of To-day Really so Vulnerable as Some Naval Experts Would Have Us Think?

By A. J. McWHINNIE

BRITISH naval designers are constantly wrestling with the problem of whether or not our warships can be made to stand up better to attack by torpedo and bombs. An argument of the critics has become too general. There are many people content to say, and believe, that, whereas German cruisers like the *Prinz Eugen* can be pummelled and pounded, yet still get back to their bases for repair, British ships just sink. What the layman doesn't know, or doesn't understand, is that there have been cases where British cruisers have been hit, but have sailed on, and reached port safely for docking and repair.

But, whereas Britain faithfully announces all losses of warships, from battleships down to tiny craft like trawlers and M.L.s, there is at most times complete secrecy about ships which have been hit, damaged, yet survived. Early in the war, Mr. Churchill, when First Lord of the Admiralty, said that losses of warships would be announced, but it was not his intention to inform the enemy of damage to H.M. ships.

Why tell the enemy they have scored a temporary success? That success only lasts until the ship damaged gets back into the sea war zones. I know many warships, big ones and small ones, which are fighting fit and looking for battle to-day, because their strength in design and construction stood up to all the enemy could aim at them.

Remember the recent case of the cruiser H.M.S. *Penelope*. Battered by bombs, a shamble fore and aft, her sides peppered with holes, 200 bombers at a time making her their target, her guns and turrets pimpled with splinters. It went on for days. But, battle-scarred and proud, she still sailed into Gibraltar. The aircraft-carrier *Illustrious*, it has been revealed, had a running fight against 200 Axis bombers in the Sicilian Channel. But she reached Malta all right. And, under her own steam, she went on to Alexandria.

There were the destroyers *Javelin* and *Kelly*. The whole world knows how that great sailor, Lord Louis Mountbatten, now Commando Chief, got them back home to port after a battering. In both these cases the Admiralty departed from their usual custom and told the story when the time was opportune. There was the Canadian destroyer *Saguenay*. I saw her torpedoed far out in the Atlantic, flames roaring high in the sky from her fo'c'sle. But she got home. I came home with her.

In bigger ships, the battleship *Nelson*, earlier in the war, was damaged. She got back. *Ajax* and *Exeter*, in their terrific fight with the superior *Graf Spee*, which they beat, were hit themselves. But thousands of people welcomed the triumphant return of those ships to Britain.

One must remember these cases. They have been published. There are others filed away in confidential records. But, because we are most times silent about our damaged ships, there is a false impression created in the lay mind.

It took a great many torpedoes to sink the *Prince of Wales*, far more, I am told, than in the case of the *Bismarck*, which we know was hit six times by torpedoes, apart from damage by heavy gunfire.

The experts are always investigating the construction and design of our warships. The man-in-the-street knows that, and it may, in some cases, strengthen his belief that "there is something wrong." It doesn't mean that at all. It merely means that all the evidence is being constantly sifted, and a constant regard being paid to possible improvements. But the fact remains that the evidence does not always support the critics, who, in most cases, have nothing definite on which to base their criticisms.

On the other hand, it is a fact that British warships are not subdivided by watertight bulkheads to the same degree as the German ships. There is a reason for that. British naval craft have to sail all over the world. Acute subdivision, especially in tropical seas, would make living conditions intolerable for the crews.

It would be foolish to minimise German warship construction, or to blind oneself to the fact that those ships, because of their great watertight subdivision, which gives them buoyancy, are hard to sink. But the German ships were constructed not for world-wide operations so much as for shorter patrols, in many cases not far from their own bases.

Germany has developed this protection to a degree by which they have created trouble for themselves in an unexpected direction. The men's quarters are cramped and exceedingly uncomfortable. And to this fact the discontent which broke out into mutiny in 1918 can be partly ascribed. But British warships have suffered in other ways. Far too often our warships have lacked adequate air protection.

Then there has been the problem of having no shore-based dive-bombers and torpedo-bombers available when attacking enemy warships. The *Prince of Wales* and the *Repulse* were sunk by powerful dive-bombers and torpedo-bombers. They were attacked from shore bases. And shore-based aircraft is far more powerful and effective than similar types of aircraft flown from carriers.

Our deficiencies in this direction are being made up. We have learned bitter lessons. And I have no doubt that, had we had large forces of R.A.F. dive-bombers and torpedo-bombers operating from shore bases to attack the *Scharnhorst*, the *Gneisenau* and the *Prinz Eugen* when they made their dash through the Channel, the story of their dash might have had a far different ending. So, apart altogether from the actual design and construction of our warships, there have been difficulties in the past over air protection.

There is another point. It is believed that the airborne torpedo we have been using is of the 18-in. type. The heavier and more powerful 21-in. torpedo might sink more enemy ships, even with their many watertight bulkheads. But there is a lot of luck in it. Everything depends on where your torpedo hits. If one hits the magazine, any ship would sink. She would blow up. Remember the battle-cruiser *Hood*. She was the victim of a lucky hit.

It isn't enough to say, in general terms, that our warships sink too easily. Vital points to be considered in every case are: Where was the ship hit? Had she effective overhead protection? If attacked from the air, was she within range of shore-based bombers and torpedo-bombers?

THE DANGERS OF THE COLD MURMANSK ROUTE TO KEEP RUSSIA SUPPLIED WITH MUNITIONS: With the United States shore waters, this is one of the main areas in which the enemy is striving to catch Allied ships by warplane and by U-boat. Shore-based enemy aircraft have taken a heavy toll in this area of snow-covered headlands and dark-heaving waters, and many a good freighter and warship have gone down on this route whilst succouring our Soviet ally. A typical scene of a ship set on fire by bombs is here shown. The crew have got away and are awaiting the arrival of a British destroyer.—*Drawing by W. G. Whitaker*

"LIBERTY SHIPS" IN THE UNITED STATES lie two abreast in the shipbuilding yard as they await their fitting-out. This is the last stage in their preparation for sea. The U.S. shipbuilding effort is now on a very big scale, and soon it may be expected to overtake the enemy sinkings from which the Allied merchant fleets have recently been suffering badly

MAINTAINING the BRIDGE of SHIPS

A Stupendous Task—But It Must Be Done!

By ALFRED GRAHAM

FROM the slips at Bremen, Kiel and Rostock, from Taranto and Spezia the U-boats are being launched as fast as the Axis labourers can be made to turn them out. From the yards on Clyde, Tees and Tyne, from California, Virginia and Hog Island the merchant-ships are being delivered as fast as the riveters can hammer the plates together. On this battle of brain and brawn depends the whole outcome of the war. If the Axis could maintain their sinkings at the rate they achieved early in 1941, equal to about 6,000,000 tons a year, they might enforce a negotiated peace by next summer. If the Allies can keep up with their dual job of sinking U-boats and building merchantmen, we shall be able to transport for ourselves and our Allies the vast output of arms which will eventually ensure superiority and victory. The side which fails in its appointed task will, in all human probability, lose the war.

What is the size of the problem? Admittedly, it is gigantic enough to strain the last ounce of strength and skill from the Democracies. At the beginning of this year the Allies had about 25,000,000 gross tons of shipping between them. If we are to go on the offensive this year, or next, we shall need a much larger figure—remember, it takes 10 tons of shipping to transport one soldier. The exigencies of war make a forecast almost impossible, but (according to one school of thought) it is putting the matter very moderately to say that we should want a total of at least 35,000,000 gross tons for feeding and fighting at the same time. This would entail the construction of at least 10,000,000 tons extra shipping, and meanwhile one must remember that the enemy is sinking Allied ships at an estimated figure of 3,000,000 or 4,000,000 tons a year. Consequently, if by this winter we expect to have the ships necessary to go on the offensive, 14,000,000 tons of shipping will have to have been built on one side of the Atlantic or the other.

Can it be done? We know what Britain and the Empire can build; about 1,250,000 tons a year is our all-out limit. Can America provide the balance of 12,750,000 tons? Most Americans think they *can* do it. Not a few Americans doubt if they *are* doing it, or if, in fact, they have set about the problem in the slickest possible way. *Fortune*, the famous American magazine, calls shipping the most urgent problem facing their nation to-day, and reminds Americans that "there can be no strategic withdrawals from the oceans." *Fortune* states boldly that most American yards are in arrears with their programme, and attributes this to the unwillingness of Admiral Land, Chairman of the Maritime Commission, to spread orders outside the ranks of the old-established and experienced American shipbuilders. The launching of three 10,000-ton ships a day is the figure Admiral Land has to achieve to keep up with his schedule. So far, says *Fortune*, he is about 25 per cent. behind.

Now, in assessing the value of these criticisms, several important provisos must be made. In the first place, shipping and shipbuilding are the province of the expert of experts. Every kind of pitfall awaits the journalist, however well-guided, who attempts to weigh up the situation. Even in calculating tonnage, one may go wildly astray, for several systems are in use. Cargo-vessels are usually assessed by dead-weight tons (cargo capacity); liners by so-called "gross" tonnage—i.e., overall size. A tanker of 15,000 "dead-weight" tons might be only 8,000 tons gross. A liner such as those used on the South

American chilled-meat routes is the reverse case: say 22,000 tons gross, but only 5,000 tons dead-weight. Calculations may thus go very wide of the mark. Not only this, but ships are not interchangeable: an oil-tanker cannot carry general cargo, an ordinary tramp is useless for meat transport, and a refrigerated ship is wasted on general cargo. Not all ships have the necessary bunker capacity or freeboard for use on all routes in all weathers. To state that so many thousand tons of shipping have been built or lost in a given period is therefore to say virtually nothing, unless the types or names of the vessels are known. Remember also that "launchings" mean nothing—a cargo-vessel may leave the slips in any condition, complete to the last nut and almost ready to sail, or a mere shell requiring months of work to complete.

Offsetting *Fortune's* criticisms is the fact that American shipbuilders themselves, while showing no complacency, at any rate give no signs of alarm. Admiral Stark, C.-in-C. of U.S. Naval Forces in Europe, states that American shipbuilding has now overtaken Axis ship-sinking. His compatriots can certainly point to some substantial achievements, superlative in the light of any established precedent. In April last, 36 merchantmen were not merely launched but completed and delivered—actually over 51 ships were launched in April, which is more than double the January figure and is really approaching the "target" figure set for the industry.

The biggest day's launching so far this year was on May 22, when a total of 27 ships left the slips of U.S. yards as far apart as Maryland and California. Moreover, this was not an "organised" event: it merely just did happen.

THE MEN WHO PLAN THE RUSSIAN CONVOYS: When a Convoy gets through to Russia, or another arrives from the U.S., a large share in the victory should go to these men, on whom a great responsibility rests: they are members of the Trade Division at the Admiralty. From left to right are: Captain Bittleston, Commander Morey, Vice-Admiral King, Commander Leggatt and Captain Schofield

THE "NORTHERN SKY" pitching and rolling at slow speed along her patrol lines: There is a slight sea running and the ship waters continually—but this is mild weather for trawlers!

Members of the crew of this naval trawler recently destroyed a Heinkel by machine-gun fire whilst on patrol in the North Atlantic. The *Northern Sky* is a former member of the Grimsby fishing fleet: she now helps to maintain the Northern Patrol, one of the toughest jobs at sea. In addition to contending with enemy mines, aircraft and U-boats, these men must contend also with the monotony of a ceaseless watch, their ship battered and tossed about on every patrol. Spring has, however, brought a measure of relief to them, after the very unpleasant record of the past winter in the North Atlantic

Traditional U.S. methods of hustle are having their effect. Standard time of completion for the 10,000-ton Liberty class has been set at 105 days. Some yards have clipped this to 75 days, while in one yard at Portland a ship was actually afloat 30 days after the keel was laid, and in service three weeks later.

These figures are achieved by the creation of shipbuilding "yards" miles inland. Large units, such as the bridges and charthouses, hatches, bulkheads, are pre-fabricated by firms previously making railway equipment, road bridges, etc. Careful standardisation enables these units, when received at the slips, to be riveted into place without loss of time. The slips are thus becoming assembly-places for ships pre-fabricated in dozens of different factories miles apart. Not only this, but the utmost economies are being effected in metal as well as time. Welding is increasingly used and is claimed to cut the total weight of steel for one ship at least 10 per cent., making an impressive total when thousands are being built.

So much for the positive side. Now for the negative aspect of preventing the ships, once built, from being sunk. The Atlantic is no longer the graveyard it once was. In United Kingdom waters, and the Eastern Atlantic, the loss is probably well below 500,000 tons a year. Lloyd's brokers will now insure your life, if you are travelling from England to New York by sea, at the low rate of 1 per cent. In proportion to the volume of traffic, the losses in all home waters are, in fact, remarkably low. One may hope that in future it will be possible to make the Northern route, by which the bulk of Allied assistance reaches Russia, equally safe. At the moment our losses here, though by no means as heavy as the Germans claim, are serious. The last big attack on a North Russia-bound convoy appears to have cost us five or six ships and an escort vessel.

Some considerable natural difficulties stand in the way of any immediate improvement. First, there is the proximity to enemy-occupied territory in the far north of Norway, where there are quite adequate summer bases for submarines and bombers. The long Arctic daylight at this season also makes attack possible at every hour of the twenty-four. Worst of all is the permanent ice-barrier which fringes closely on the last stages of the run and which makes "evasive routing" (one of the best anti-submarine tactics) impossible. The track which our ships must take to avoid the ice is known to within a mile or two, which simplifies the U-boats' task immensely. A considerable increase in the strength of our escorts, both planes and destroyers, seems the only course open to us, and here again we come up against the old difficulty—there are not enough to go round. The biggest losses are undoubtedly occurring in U.S. territorial waters, where vessels are frequently torpedoed in sight of shore. Americans candidly admit their anti-U-boat measures do not yet approach British standards; in part, because of the greater territory to be covered, and partly from lack of equipment and experience. The gap is being narrowed, however, and if it can be closed completely, over 300 ships a year will be saved.

Any marked change for the better in the European situation would also improve shipping prospects. If we could occupy Libya, our shipping could reach Egypt via Gibraltar, instead of via South Africa—a three-weeks voyage instead of three months. If the 1,000-bomber raids can kill the U-boats on the slips instead of stalking them in the ocean spaces, convoy precautions could be relaxed—and a ship sailing free has three times the efficiency of a ship sailing in convoy.

Most important of all, if the occasion arose, Great Britain could undoubtedly live on her own fat for several months while shipping was diverted to a more active role in terminating the war. Our standards of living are still very high for wartime; we are probably carrying more food stocks than ever we did in peace. For a brief period and a worthy cause, we could certainly slash our non-essential imports more drastically than anything yet contemplated. On balance, therefore, the shipping situation will probably be no tighter a squeeze than the rest of our war effort—the job can be done if the necessary determination is applied.

Members of the crew of a British destroyer on escort duty, well wrapped up as they carry out their tasks in Northern Waters

THE STARBOARD SIDE OF H.M.S. "PENELOPE" after heavy attack by enemy aircraft in the Mediterranean: There are hundreds of holes, from fragments of the bombs dropped near her whilst in Malta Harbour, and these were all plugged before she sailed for Gibraltar

The STORY of "PENELOPE" ("H.M.S. PEPPERPOT")—*cont.*

In last week's issue of *The Sphere* we published the story of H.M.S. *Penelope*—"Pepperpot" to her friends—now in a United States port for repair. The pictures reproduced here amplify those published last week. *Penelope* is a British cruiser which was in prolonged action with enemy aircraft in the Mediterranean. During a fortnight's stay in Malta she was the chief target of some of the heaviest raids the island has yet experienced. On putting out to sea she was repeatedly attacked by both German and Italian dive-bombers and torpedo-droppers. The whole of this time her guns were almost continuously in action and to such good effect that the ship escaped with only superficial damage from splinters. Six of her officers and men were killed and a larger number wounded: the latter included her captain, who carried on until he had brought her safely into harbour. There is hardly reason to ask why *Penelope* so quickly became "Pepperpot" after her arrival in the United States for repair!

THE DUKE OF GLOUCESTER PAYS "PENELOPE" A SURPRISE VISIT after her gallant and prolonged action, and congratulates the ship's company on their fine performance

THE PORT SIDE OF H.M.S. "PENELOPE," showing the pegs inserted in her hull where the outer skin was punctured by fragments of shell splinters

GIVING the NEWS to EUROPE

The Work of the European Service of the B.B.C., and How the Continent is Kept Informed Over the Air of the Real Progress of the War

Described by
CHARLES GRAVES

NOW that the B.B.C. European transmission of the news in English takes place at 10.15 p.m. (as well as at 10 a.m. and 3.30 p.m.), it is acquiring a vast audience in this country as well as on the Continent. Even now these transmissions are not publicised, but you will find them on 373 metres (Welsh Regional), on the 1,500-metre (Long Wave) and on five short waves, including the 49-metre band. It is because they are dealing with propaganda that these transmissions come under the Political Warfare Executive, which, in turn, is controlled by the Foreign Office. And therefore no publicity is sought for it.

The relationship of the Political Warfare Executive to the European News Service in English is roughly that of the proprietor to the editor-in-chief. Normally, the proprietor does not complain. . . . Ivone Kirkpatrick is the Controller of the European Services and may be regarded as the editor-in-chief. The Director of the European broadcasts (roughly corresponding to the managing editor) is Noel Newsome. Mr. Newsome gives directives for the various language broadcasts, arranging that one particular piece of news should be emphasised in the French broadcast and another in the German broadcast. All the material is written for broadcasting and in non-newspaper technique. That is why it is so much more vigorous. Each language transmission has its own news editor, who produces his own news, with a feature editor as well if the language is important. Features editor-in-chief is Gibson Parker, who is in charge of the production unit. This dramatises the news and is breaking new ground every evening in radio technique.

Each language broadcast has its own features. The French includes "Les Trois Amis," which occurs in the period called "Les Français parlent aux Français." The English transmission has "The Man in the Street" (I know him personally, but may not disclose his identity for the moment) and Colonel Britton, who gave his forty-ninth broadcast on May 8, and will perhaps soon make a sensational return to the microphone with his fiftieth. Personally, I think it unfortunate that the de Gaullists and other exiled Governments do not possess their own radio station and have to rely on so much time per day from the B.B.C. . . . It also occurs to me that more use should be made of simple words, even basic English. The other night the announcer used the word "riparian." That will mean little or nothing to people in the occupied countries for whom English is a second or even a third language. It is all the more desirable that simple English words should be used, because an increasing number of the subject peoples of Europe are "brushing up" their English from the European News Service. This is equally true of Portuguese, Spaniards, Swedes and Swiss. (It is surprising how big are the letter-bags received by the B.B.C. Intelligence Department from Occupied Europe by way of Lisbon as well as from officially-neutral countries.)

But what are the mechanics of this European News Service? The answer is that all tape and agency news comes to the chief copy-taster in the main newsroom. He has a chief sub-editor and a staff of other sub-editors. There is also an editor of the day. The sub-editors here need to be more creative than in Fleet Street. They dictate their stories to girl secretaries, who type them out for a central multigraphing department. Copies are then sent out to the various language units as basic raw material. At the moment there are 121 news bulletins sent out every twenty-four hours in twenty-five different languages, including Albanian. This raw material is received by the regional editor and his sub-editors, who compile it in its correct news value for local consumption before handing it over to the translators. In addition, each regional editor acquires stories from his own Embassy or exiled Government as well as sending out his own reporters for stories of special interest to his country. It is evident that the Press Association cannot be expected to pay as much attention to Greek or Yugoslav news in this country as would be wanted for Greek or Yugoslav listeners. In addition, the Political Warfare Executive supplies material. The Political Intelligence Department, too, is helpful, while the three Services also help to keep the pot of information boiling.

The busiest hour of the twenty-four is between noon and 1 p.m., when the Libyan, Royal Air Force and Russian communiqués all come in. A hardened Fleet Street sub-editor tells me that he began to admire the efficiency of this Department of the B.B.C. on the day that he joined it. "The pressure is far greater," he explained. "Newspapermen, even on evening newspapers, have a comparatively slack time between editions. Here we have an 'edition' every fifteen minutes. And don't forget the Morse bulletins which are sent out. These are harder to jam and excellent for the editors of underground newspapers and news-letters on the Continent."

Reporters and sub-editors of the European Department of the B.B.C. have an eight-hour day, the shifts being the dawn shift (1 a.m. to 9 a.m.), the day shift (9 a.m. to 5 p.m.) and the night shift (5 p.m. to 1 a.m.). After six days consecutively on duty they are entitled to two days off. But most of them work more than is necessary. They seem quite infected with enthusiasm for their work, and realise that the criticisms in the House of Commons and the newspapers are based largely on ignorance or axe-grinding. How many people realise, for example, that the dawn bulletins to the peasants and factory workers all over the Continent begin at 4.50 a.m. and continue until 8 a.m., varying the news as it comes in?

The technique of the news presentation is different from that of a newspaper. The longest non-lead news-story is about 300 words, and the basis of all assessment of news value is "Is a man going to risk his life to listen to this?" If Sir Archibald Sinclair announces that we are going to bomb Germany more violently than before, this statement is three times the value to European listeners than it is to us. Equally, the talks by Colonel Britton and "The Man in the Street" are infinitely more effective over there. But whenever there is bad news, the European News Service heads the communiqués with it. This teaches listeners in Spain, Portugal and Sweden as well as the occupied territories that we are not afraid of the truth. When Singapore fell, when H.M.S. *Hood* was sunk, when we lost all those other ships in the Java Sea battle, the news headed the bulletins. No attempt, in fact, is ever made to cover up disasters. On the other hand, it is obviously necessary to check on policy, to prevent divergence and see that the general inspiration of the verbal output is the same, even though the presentation may vary technically according to the audience.

One of the differences between the ordinary B.B.C. news reading and that of the European Department is the Continental innovation of having different announcers following one another in the same communiqué. One of these is that star broadcaster Lionel Gamlin, whose voice was so well known on the Home Service in peacetime.

It was on August 31, 1939, that Noel Newsome, then on the *Daily Telegraph*, was told that he was to report at the B.B.C. next day. He found a staff of five other people, including Douglas Ritchie, also of the *Daily Telegraph*, who were already putting out bulletins in five different languages. At the time of Munich the languages had only been French, German and Italian, though Spanish and Portuguese were soon added. The others followed almost exactly according to Hitler's invasion programme. The first Dutch broadcast occurred only a few days before Hitler treacherously attacked Holland. The first Norwegian broadcast occurred on the day after Hitler went in. It became almost a morbid joke that whenever the B.B.C. started a new foreign-language transmission that the country at which it was directed promptly fell under the Prussian heel.

To-day there are two general networks. The blue network covers Western Europe. The yellow network covers Southern and Northern Europe. The original editorial staff of six has swelled to over 100 (the majority of them being real newspapermen). The original fifty translators, messengers and typists have risen to over 800. But when I repeat that they transmit 121 broadcasts in twenty-five languages per twenty-four hours (sometimes two simultaneously), this seems a not unreasonable staff.

To generalise, the European News Service of the B.B.C. realises clearly that it has eight or nine targets in its broadcasting offensive. It explains why we are going to win the war; why it is a good thing that we should win the war; it tells, through Colonel Britton, how the enslaved peoples can help us win the war; the progress of the war; what we intend to do with the peace. The latest idea (and to my way of thinking, it is an excellent one) is to plug "Lilli-bulero," the regimental march of the Senior Commando. This was the tune which is said to have laughed King James II. out of his three kingdoms—England, Scotland and Ireland. Modern versions in English and foreign languages have been written, and once again it may justify Bishop Burnet, who said at the time: "The whole army and at last the people, both in city and country, were singing it perpetually. Never had so slight a thing so great an effect."

MR. IVONE KIRKPATRICK, Controller of the B.B.C. European Services (standing), with Mr. Trygve Lie, Norwegian Foreign Minister, at the microphone

PROFESSOR NAND GEERSENS, Organiser of the B.B.C. Flemish programmes in the European Service

COLONEL H. R. G. STEVENS, who broadcasts regularly in the B.B.C.'s transmissions to Italy

MR. LINDLEY FRASER, who broadcasts regularly to Germany. He also gives news commentaries to North America and war commentaries in all Empire services

MR. SEFTON DELMER, the well-known foreign correspondent, who regularly replies in B.B.C. programmes to the commentaries of Hans Fritzsche, the German Government broadcaster

MEMORIES OF FIFTY YEARS—

An Experiment in Autobiography—XIII

By J. G.

THE PLEASURES OF LIFE.—I pause at this stage to attempt some rough marshalling of the chief recreational pleasures of my life.

I say "recreational" advisedly, because I have not the least doubt that the only abiding, constant and utterly chance-proof pleasure and objective in my life has been my tardily-chosen business which, for lack of a juster definition, I will call my craft. I have derived and still derive a full measure of contentment and pleasure (if not satisfaction) from my invariable daily duty of writing about a thousand words of journalism or of less ephemeral matter. And I think that (trivial, repetitive and hackneyed as much of that matter of necessity is), if I had to abandon the practice, life would hold nothing worth the trouble of living for. In two words, beyond this habit of writing, the chief delights of my life have been in reading and in shooting.

THE "UNOFFICIAL" FIANCÉE OF KING PETER OF YUGOSLAVIA: It has been reported that Princess Alexandra has become engaged—unofficially—to King Peter. The Princess is twenty years of age; the King nearly nineteen. She is the daughter of Princess Astasia and of the late King Alexander of Greece, a niece of King George of the Hellenes and a cousin of the Duchess of Kent. Princess Alexandra, dark-haired and attractive, lives with her mother in Grosvenor Square

Shooting.—There may be something shocking in the combination. No man need be ashamed of confessing a lifelong and prime pleasure in reading sound literature, but to marry that worthy pursuit to the controversial recreation of shooting harmless little creatures with a scatter-gun, that opens gaping joints to the shafts of criticism in a man's harness.

Nevertheless, it is the truth, and I am not sure that I have not derived as much pleasure from the artificial set pieces of the sport as from the "wild-life," marauding art of venery which is less objectionable to the critic. I have been lucky and enjoyed the best of everything in shooting, having had nothing to offer to my hosts in return beyond a certain facility acquired by long practice in killing their game.

For several years I enjoyed some of the best grouse driving in Britain as the guest of Percy Chubb, that Anglophile American and delightful host, at Drynachan. And for years during the "bad old days" I took part in great partridge drives and in big covert shoots where the birds flew high and were shown to perfection, and, best of all sports, in duck flighting on the Broads. I cannot pretend that I ever despised either the artificial or the gargantuan in shooting, always provided that the artificial efforts made for greater skill and not only for heavier bags. Indeed, it was late in life before I made a horrible discovery that it was possible to be bored by a day's shooting if the pheasants were low, the beaters apathetic and the company uninspiring.

But no doubt at all, the man who is an observer of nature is less prone to such discoveries than one who, like myself, sees without observing and reads without absorbing the book of nature.

God bless my soul, what bliss I have derived time and again during that hour of anticipation, *all-set* in my grouse butt high on the purple moor overlooking the sparkling blue water of the Firth of Forth, waiting for the "trouble to begin" at the start of a new shooting season in early September! But the man who cannot by the time he is thirty reach the stage of proficiency in killing *or* missing his birds *clean* should give up shooting and take to golf; for he is then fair game for the critics of blood sports.

I have spent a great deal of time in playing games and have derived pleasure (altogether a minor pleasure) from cricket and lawn tennis, and even hockey and football and long jumping. Golf also, but I never got any kick out of it and rather despise it as a sad dissipation of energy. I prefer a country walk.

THE MARQUESS AND THE LAND-GIRL: The Marquess of Northampton with his bride, Miss Virginia Heaton, a land-girl, after their marriage at the Caxton Hall a few days ago. Miss Heaton met her husband when she was working on his estate at Castle Ashby, Northamptonshire

Reading.—What shall I say of reading? A man cannot hold a post-mortem on the love of his life. I have read everything on which I could lay my hands written in my own language; but all too little in foreign languages. How can I estimate my debt to Shakespeare, who opened for me the gates to Paradise? How compute my debt to novelists, essayists, poets, biographers, historians? How put into words the consolation afforded me in times of war and other troubles by the output of such pleasure-givers and escape-finders as Jane Austen, Trollope, Froude, Marbot, Hudson, and a score of big and small fry?

I will add but one footnote from my experience of reading—the sad fact that even among the immortals our idols develop feet of clay and, as we grow older and more discriminating, we begin to see the faults in our once unchallengeable literary gods. We dethrone the Stevenson of our youth and discover faults in the art of the literary masters of our schoolroom days.

But this debunking is more likely to fall upon the emotion-makers of the sister arts—music, the drama, painting.

The Call from the Past.—Stimulated by an Agate confession of his chief emotions in his career as a dramatic critic, I have tried to gather up from the past and marshal in some sort of order my own chief emotional experiences in the auditoriums of theatre, opera-house and concert-hall. I totally reject the theory that a penchant for the sentimental or sugary (or even cheap) in callow, emotional youth brands a man for ever as devoid of taste or discrimination. You might just as well condemn a sober statesman for having in his youth cherished a teddy bear or toyed with a rattle.

So I shall be perfectly honest and set forth (more or less) in order of date the productions in these arts which inspired the chief emotional excitement in my life. It may be that an ascending scale of values and discrimination may at least suggest the normal development of a normal man of the "every-day" rather than the "greenery-yallery" type. Here goes, then, baldly, and damn the highbrows of the "Sanger Circus."

The transformation scenes of the pantomimes of the '90's. *The Tales of Hoffmann* (Act II). *The Miracle*, at Olympia. *The Yeomen of the Guard*. *The Beggar's Opera*. Parts of *The Duenna*. The *Immortal Hour* (entrance of Midir). *Prunella*. The "Londonderry Air," played by I forget which master violinist. *Fidelio* (Prisoners' scene). The "Fifth Symphony" (Berlin Orchestra).

So much for the sheer emotion of a new revelation (grand or trivial, it matters not; for it is the emotional experience and not its cause which scores a record in memory). Of occasions in the theatre from which I have derived chief delight of a calmer, more discriminating, kind, I should record John Hare in *A Pair of Spectacles*, Ellen Terry as Lady Macbeth, Mrs. Patrick Campbell in *The Second Mrs. Tanqueray*, Irene Vanbrugh in *His House in Order* and Arthur Wontner as Edward Voysey; the entire productions (seen for the first time) of *Henry IV* (Part II), *The Winter's Tale* (at Stratford) and *She Stoops to Conquer*—revelations of the art of the dramatist which are invisible to the ordinary man from a mere reading of plays, and can only be appreciated by the marriage of eye and ear. Laughter-making is in a distinct category. The Kings and Queens of the Music Hall have most of them racked my sides, and, worse, given me agonies of headache and jawache from laughter which never came easy to me; and three moderate plays stand out entire in this genre: *The Man from Blankley's*, *Lady Huntworth's Experiment* (Hawtrey and Miss Compton) and a quite forgotten piece, *Pilkerton's Peerage*. A curious scrap-bag, and perhaps a damning dossier. But what is taste but a series of milestones, none very exactly measured nor based on firm foundations?

TWO NEW WOMEN ANNOUNCERS AT THE B.B.C.: Home Service listeners may have heard unfamiliar voices making announcements over the air in recent weeks. Most of them are women, who are being recruited to take the place of men. On the left, above, is Mary Malcolm (in private life Lady Bartlett, wife of Major Sir Basil Bartlett); and on the right is Joy Worth (a member of "The Cavendish Three" until the outbreak of war); both have been taking turns recently at reading the announcements

THE NEW WATERLOO BRIDGE IS RAPIDLY APPROACHING COMPLETION: Part of the roadway has already been laid, and a steam-roller is finishing off the asphalt surface. Temporary rails are being fitted for a while, but lighting-cables are to be put in ready for the day when all lights can be put on again

(The next article in this series will be published in the issue of July 11)

ITEMS OF HOME INTEREST

A YORKSHIRE "CLIMMER"—These guillemot eggs will be sold, and the reward shared with the haulers who lowered him over the cliff edge : Hundreds of thousands of eggs are waiting on the Yorkshire cliffs to be collected. They can be seen (if you dare go so near the edge) resting on the ledges all the way down to the sea. From the middle of May to the end of June, men risk their lives on this hazardous occupation to collect the precious sea-birds' eggs : they sell at three shillings a dozen, although occasionally a rare egg is found which will fetch five pounds from a collector ! The climbers—or "climmers," as they are called locally—are now elderly men. They set out from their homes at dawn, walk miles to the cliffs, and toil there till dusk—despite that many of the "climmers" are over seventy. The younger men—and these are in their late fifties—are the actual climbers. Lowered by rope past the dangerous crags, they follow a guide-rope down, collecting the eggs of guillemot, puffin and seagull as they go. Up and down they go until there are enough eggs to be divided between each member of the party, for sale later in the nearest town

A YORKSHIRE "CLIMMER" AT WORK : Lowered over the high cliff to secure guillemot eggs for food—a Yorkshire coast occupation during May and June

THE OFFICIAL OPENING OF THE SERPENTINE ANGLING SEASON IN HYDE PARK : Mr. George Hicks, the Parliamentary Secretary of the Ministry of Works and Buildings, opened the first angling season in the Serpentine a few days ago. Mr Hicks made the first cast, followed by Sir Jocelyn Lucas, M.P., who first raised the question of fishing there. Three thousand permits have already been issued by the Hyde Park superintendent, and 1,200 further applications are being dealt with. Fly-fishing, or spinning, or the use of hemp-seed, are prohibited. The picture we reproduce here was taken on the opening day

A BRITISH-MADE SADDLE AND EQUIPMENT AS A GIFT FOR MARSHAL TIMOSHENKO : This officer's saddle, complete with equipment and bridle, has been made in London and will shortly go to Russia for the use of Marshal Timoshenko. The tribute is being sent as a gift from the Fine Arts Comforts Gift Fund for the Red Army

The World of Books—By Vernon Fane

OF PEOPLE and PLACES PAST and PRESENT

More News from the Enemy's Camp—"What Russia Did to Germany"; The Eccentric Egertons, Mr. Bernard Falk's Candid Family History; John Barrymore—a Fine Obituary

THE new literary tradition of American newspaper correspondents who travel, not with a Field-Marshal's baton but with at least a publisher's contract in their knapsacks, finds expression again, this time in a book of reminiscences and political soothsaying by Mr. Howard K. Smith. Mr. Smith was in Germany for six years and left Berlin last December, on the very eve of America's coming into the war. LAST TRAIN FROM BERLIN (Cresset Press. 10s. 6d.) tells the experiences of the last American newspaperman to leave the capital and, in particular, gives that man's eye- and ear-witness account of the great changes that have taken place in Germany since the beginning of the Russian war.

The first part of the book is devoted to an exposition of the writer's own views on Germany and on the war till that moment; his own "prejudices, predilections, sophistications—or lack of them," and to the impatient reader he suggests that he should turn immediately to the third chapter, skipping the personal history and beginning directly with the story of Germany since June 22, 1941.

From then on, the book might well be subtitled "What Russia Did to Germany," for that is the wide angle from which Mr. Smith views the scene. "All that was revolutionary in Nazism," he writes, "collapsed last autumn. I was surprised, on coming out of Germany for the first time in nearly two years, to learn that the fact was virtually unknown in the outside world. . . . Briefly, what happened in August and September of last year was the decline and fall of what had once been Hitler's mightiest political weapon—the glorious brown army of the *Sturm-Abteilung*, the thunderous Storm troops, the fighting vanguard of the National Socialist Revolution."

The writer compares, in this connection, the Russian with the Hitler revolution, and draws some highly interesting, though not necessarily definitive, conclusions. "Whether one likes it or not, the Bolsheviks came to power on the shoulders of the working classes of Russia. . . . Whether one likes it or not, the Nazis came to power against the will and violent opposition of the German working class which acted with singular unity at the last, late moment."

"The Russian war period has revealed three fissures in Hitler's Nazi monument; three distinct elements of revolt. . . . The three in order of ascending importance are: the Communists, the Church and its followers, and the conservative Prussian military caste." Mr. Smith bases that ranking on the information he has been able to gather, under the most difficult of circumstances, and gives brief analyses of each, concluding that the third element of revolt, "the discontentment and uneasiness of the military leadership, is at this moment the most important of the only three *organised* elements of revolt which exist in Germany."

The italics are mine, but the emphasis throughout these passages is the author's, as he points out the threat that any organisation of power, even one created by Hitler himself, can be to his new order.

On domestic, every-day, housekeeping Germany Mr. Smith is equally provocative and, since his experience is both first-hand and recent, it is worth studying. "I want to emphasise," he writes, after giving a list of shortages in food, clothing and drink that the German citizen must accept, "that all these scarcities and absolute disappearances of things were not spread over two and a half years of war. They came all at once. In five months the face of Germany's supply situation changed with a swiftness that was staggering. The only figure which describes it was a dizzy, downward spiral."

"The phenomenal Cinderella-boy from Braunau-am-Inn has had a swell time," he remarks later, "but it would appear to be getting on towards midnight. Even with his expertness at it, it is highly unlikely that he can turn this particular clock back."

CLEARING UP "BLITZ" DAMAGE IN THE CITY OF LONDON: A new picture of a badly-damaged area, taken from Finsbury and looking towards the south. Many textile houses and their associated trades were housed within this district. On the left can be seen the steeple of St. Mary-le-Bow Church, in Cheapside; in the centre is St. Paul's Cathedral; and on the right is the dome of the Old Bailey. Running across the view is Chiswell Street

With THE BRIDGEWATER MILLIONS (Hutchinson. 18s.) we escape into a past and into a society remarkable as much for its profligacy as for its eccentricity. Mr. Bernard Falk calls his book "a candid family history," and certainly he allows few reticences to slow down his vigorous pen portraits of the Egerton family, who were Barons Ellesmere, Viscounts Brackley and Earls and Dukes of Bridgewater.

The first of these worthies was a friend of Francis Bacon. He founded the family fortunes better than he knew, since he acquired estates which were to enrich his heirs in the period of the Industrial Revolution: but the Bridgewaters were rich long before that, and being rich, became powerfully ennobled. It was the third and last Duke who is the outstanding character in this family portrait gallery. Born a weakling, neglected by his fashionable mother, he grew up to be an uncouth and lonely boy. Sent abroad to do the grand tour, he was impressed by Louis XIV's Languedoc Canal, which spanned France from the Atlantic to the Mediterranean.

Jilted by the famous Duchess of Hamilton, he turned to the development of the commercial possibilities of his estates just being revealed by the industrialisation of the country. He fell in with James Brindley, a rough-spoken and almost illiterate Derbyshire engineer. Between them they cut the famous Bridgewater Canal. Derided by experts and costing him almost his entire fortune, it succeeded, nevertheless, in revolutionising and developing one of the country's industrial districts. Very soon it was yielding him a satisfactory income of £80,000 a year.

He died worth many times that sum, but not before he had treated his old associate Brindley with almost vicious shabbiness. Another fantastic portrait is that of the eighth Earl, an absentee parson, who lived the last twenty-six years of his life in Paris, in the sumptuous Hotel de Noailles. This eccentric clergyman mixed great scholarship with crack-brained ostentation, physical courage, profligacy and devotion. He organised fox-hunts in the grounds of his house in the rue St. Honoré, dressed his dogs up like human beings, and had them to dine with him at his table, waited on by liveried footmen, and succeeded in defying Napoleon when he sought to commandeer the house.

These are only two of the portraits in this lively collection. Mr. Falk (who already has many notable books to his credit, including that "best selling" and fascinating volume, *Old Q's Daughter*) has here made the most of the very rich material he has so skilfully gathered, even if he does at times obscure the lines of portraiture with moralising adjectives.

A fantastic, brilliant and engaging figure of our own times is the subject of the week's most readable biography. JOHN BARRYMORE (Stanley Paul. 12s. 6d.) was not only "the great profile" that heavy-handed film humour has dubbed him, but a superlative actor at his best. Even at his most trivial, a fine, light comedian, and at his worst an inspired clown.

From New York, where dramatic critics are well known to fill their pens with corrosive acid and sling a handier brickbat than a bouquet, comes this tribute, written by one of the city's most distinguished gentlemen-about-the-theatre. It was written after seeing Barrymore in what he describes as "a silly play"; the last in which he appeared on Broadway, at the beginning of 1940.

"After an insipid interlude, Barrymore made his entrance in a raffish fur coat—ravaged and jaunty, weary and sardonic, ill and sprightly. I was shocked by what seventeen years of revelry had done to the greatest romantic actor we have ever had. . . . But blood and genius tell, if they are genuine; and as the evening wore on there was no doubt that we had an actor before us. He was not penitent or remorseful. He was a wit in his own right and he could laugh at himself or the play without condescending . . . a superb actor in reduced artistic circumstances was capering as buoyantly as his health permitted. But the important thing was that he was a superb actor. He owned the stage he trod on."

This was Barrymore at the end of his career, a magnificent career which included one of the best Hamlets and, many say, the best Richard III in living memory. Mrs. Alma Power-Waters's biography traces that career with a warm appreciation, and with a delicacy and understanding that far outweigh the shortcomings of her colloquial style. "'For God's sake, don't whitewash me! Play me as I am!'" said Barrymore when this biography was proposed, and that she has been able to follow that wish, without slurring over his fabulous follies or moralising on their effects, is something of an achievement.

The writer thought of John Barrymore first and foremost as an actor "who had once dominated the theatre and who could dominate it again if he could put his mind to it and wanted to." Some of the best of the Barrymore anecdotes, however, were provoked by Hollywood, where Garbo conquered her shyness long enough to make him Swedish punch, and where Katharine Hepburn is said to have turned to him in the last scene of a film and snapped: "Thank God I don't have to act any more with you!" To which he replied, "I didn't know you ever had, darling."

His own description of acting Don Juan is a gem. "I dashed around on a white horse and made love all over the lot, to girls, old women, flowers, horses and buggies, and the moon, and I looked like lilacs smell, but everybody seemed to be happy." A great many people would be happy, in this country and his own, if they could see John Barrymore again, on stage or screen, or sauntering across the street, rakish hat over one eye, shapeless flannel trousers and the lively, quicksilver glint of humour in his eye.

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Milestones . . 1933

"the aeroplane that founded a fashion"
vide "Aeroplane"

TO anyone interested in the History of British aviation, there is romance in the chance landing of the designers of Miles Aircraft on Reading Aerodrome (England), in 1930, when they disclosed their ambition to build a cheap two-seater low-wing monoplane. The Company at once offered them a corner of a hangar, and on March 29th, 1933, the first Miles Hawk took to the air.

From that moment began the serious production of a series of monoplanes of which the Hawk can truly be said to be the parent. It was an entire breakaway from their previous designs, such as the Martlet (1929) and Satyr (1931), which had all been biplanes, for the designers had come to believe in the monoplane. They staked their reputations on the future of low-wing monoplane design for low as well as high-power aeroplanes. And with this, their first attempt, they confounded the critics and achieved their aim of providing a reliable, efficient up-to-date aeroplane for the private owner's purse.

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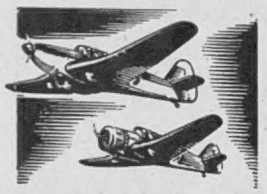

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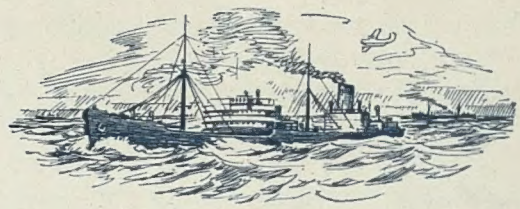

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